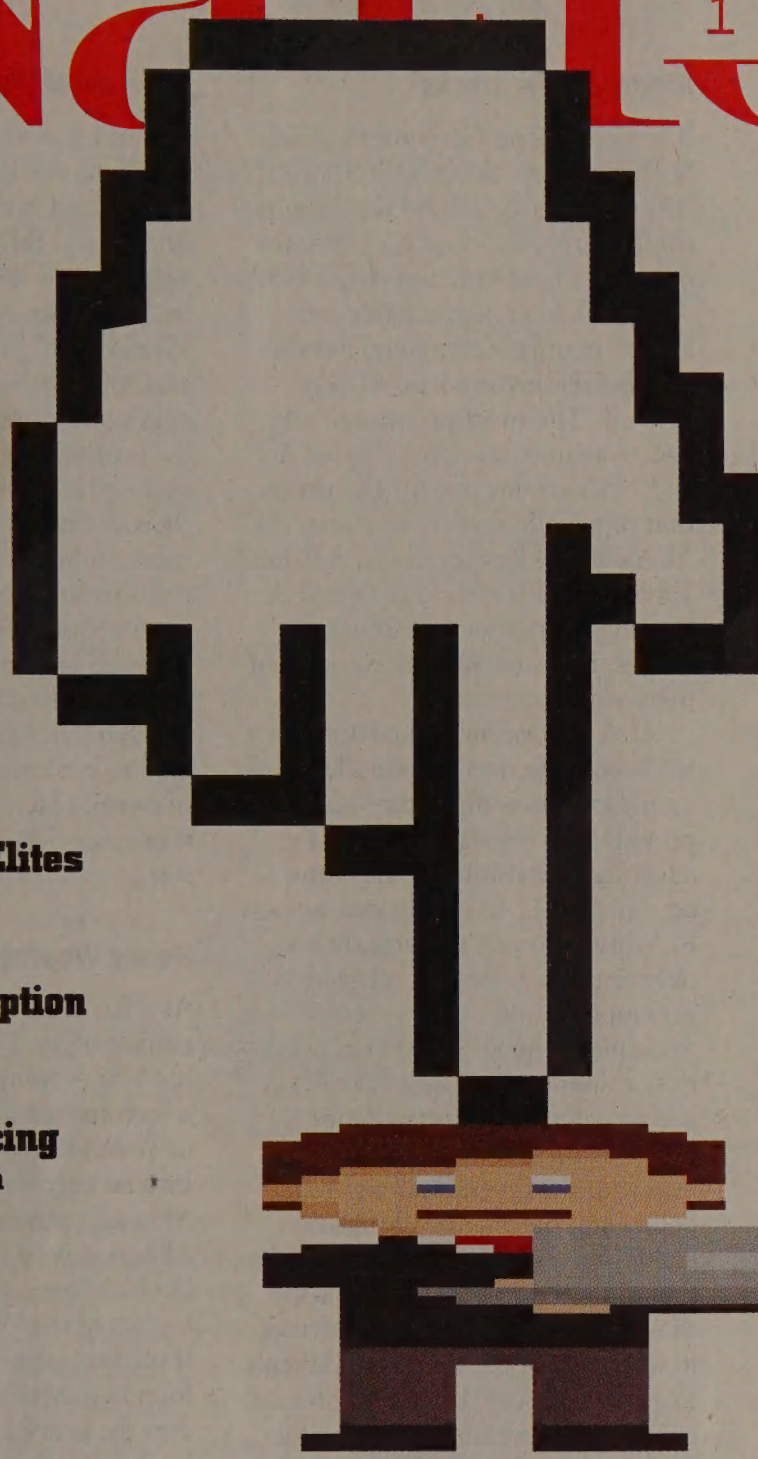# The Digital Crush

The Nation.

150

Cybersecurity Elites
by Tim Shorrock

Saved by Encryption
by Eleanor Saitta

Predictive Policing
by Ingrid Burrington

Digital Redlining
by Astra Taylor and
Jathan Sadowski

Watched at Work
by Jessica Bruder

Deleting Welfare
by Virginia Eubanks

Guest Editors:
Leah Hunt-Hendrix and Astra Taylor

Letters
@thenation.com
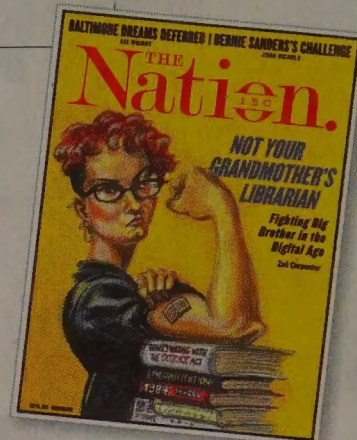
Hidden in the Stacks

Thanks for Zoë Carpenter's article "Librarians vs. the NSA" [May 25]. There is a story behind the American Library Association's advocacy of privacy issues related to the NSA. The ALA is an organization of 57,000 people with a huge number of subdivisions and a governing council. The most prominent advocate against the USA Patriot Act and NSA abuses and for the protection of whistleblowers has been the ALA's Social Responsibilities Round Table (SRRT). Although the ALA has several intellectual-freedom bodies, it has been more timid than the article suggests.

ALA opposition to the Patriot Act has been limited to Section 215, commonly known as the library-records provision. In contrast, the SRRT advocated opposition to the entire act. The SRRT has advocated support for whistleblowers by name, but the only response by the ALA has been general resolutions that articulate nice principles. The SRRT's initial resolution in support of Edward Snowden was actually passed by the council, then revoked a few days later at the urging of the intellectual-freedom bodies and the council's legislation committee. Apparently, they thought the resolution would interfere with the ALA's normal lobbying activities in Congress. It has been very difficult to get the ALA's Washington office to lobby for a number of successful SRRT-initiated resolutions, including opposition to the Iraq War, torture, and government disinformation.

My point is that mainstream organizational leadership will rarely take bold positions without being pushed by grassroots activists. That point was left out of your story.   AL KAGAN
ALA SRRT councillor
CHAMPAIGN, ILL.

Wounds of War

When I was in the US Army in Germany on VE Day, they scoffed when I said it would take 50 years to understand fully what was going on right then. The pungent summary by David Nasaw, "The Fruits of World War" [May 25], is an excellent example of what I meant. First come aggressive impulses and the thirst for profiteering in support of the extraordinary potentials of war. Then there is the tooling up for engagement and the conflict itself. But with the termination of war, somehow profits morph into costs. This article is a useful summary of the appalling, lingering, mostly unreported suffering that happened as millions struggled to get back to some semblance of normal life—or at least something more than just survival following the war.   STAN CARNARIUS
LITITZ, PA.

Heavy Weather

As a fan of Eric Alterman's media commentary, I was disappointed by his May 4 column, "Days of Crazy," which turned a lukewarm review of Bryan Burrough's *Days of Rage* into an ugly and gratuitous polemic. Although frustrated with Burrough, Alterman is far more irritated with the book's historical subjects, especially the leaders of the Weather Underground. (Full disclosure: My father was a founding member.) Alterman ponders the knack of "the most extreme, however nutty…to hijack movements purporting to fight for social justice." His emphasis is on the word "nutty," just one in a slew of pejoratives that also includes "stupidity," "ignorance," "arrogance," and "lunatics."

The claim that a small group of extremists hijacked the entire movement is hardly a historical argument.

letters@thenation.com

The Nation.

since 1865

The Retro-Future

Despite all the hype about the Internet and its start-up offspring, the increase in fresh technological abilities has been accompanied by unprecedented levels of inequality. A small crop of high-tech companies now rank among the largest corporations on earth: Google ($368 billion in market capitalization), Facebook ($232 billion), and Apple ($742 billion), the last of which enjoys annual revenue—$183 billion—that makes it more prosperous than most nations. We've entered a new Gilded Age, with its own cutting-edge variations on yesterday's robber barons.
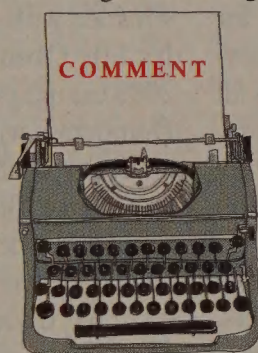
The Internet and associated technologies reflect and amplify the winner-take-all economy in which they are embedded, inseparable from the political and financial revolution that has been unfolding since the 1970s. Our high-tech tools are constrained by market incentives and government surveillance interests that are often intertwined. As multiple authors demonstrate in the pages of this special issue, we cannot think about surveillance without paying keen attention to the corporations that benefit from it and the deep inequities that result.

COMMENT

Privacy, labor, equal opportunity, and consumer protections are being eroded or circumvented by digital tracking and the rise of "big data." In various ways, the tech industry is chipping away at protections we thought we had already won. A century of labor gains is being undermined by the rise of venture-capital-funded, platform-mediated piecework (Uber, Lyft, TaskRabbit, and so on), the ever-present threat of automation, and new "productivity"-monitoring sensors and software that allow bosses to watch workers and eke revenue from them as never before. The surveillance future is here, and it is not evenly distributed: Those with the least power are disproportionately scrutinized.

Fortunately, the techno-triumphalist narrative has taken a beating lately. Edward Snowden played a vital role by revealing the collusion of state and corporate actors (Apple, Yahoo, Skype, Microsoft, Google) in promoting ubiquitous online surveillance through unrestrained data collection. At the same time, the growing awareness of the manipulation of platform users by invisible algorithms (for example, the now-infamous Facebook "emotional contagion" experiment) has sparked public outcry.

Displeasure with the tech industry gives us the opportunity to insist that we move beyond buzzwords like "open," "free," "participatory," and "sharing" to more explicitly progressive aspirations. We must insist on meaningful discussions of public goods—"public" in the sense of ownership, not just as a setting on a social-media stream. We need to talk about redistribution and what a sharing economy worth the name would look like (see our forum on "platform cooperativism" at TheNation.com). The articles in this issue and the accompanying online forum point to many direct solutions: insisting that antitrust laws function to break apart the new info-monopolies; passing privacy regulations to halt the unrestrained data collection on Internet users; enshrining anti-surveillance as a basic union demand; exploring how a basic income might provide a solution to the problem of contingent labor and technological job displacement; and ending the revolving door between the surveillance industry and intelligence agencies.

Innovations in technology are fundamentally political, and our responses need to be political in turn. No doubt, the Internet opens up new avenues and opportunities for resistance, but new technologies will not solve the problems at hand: People acting collectively will. By understanding the digital landscape, we can better organize for a system that benefits us all.

LEAH HUNT-HENDRIX AND ASTRA TAYLOR

"I actually have had supporters of the deal say to me, 'They have to be secret, because if the American people knew what was actually in them, they would be opposed.'"

Senator Elizabeth Warren, on the TPP negotiations

Fast-Track Slowdown

A Dem insurgency is "whupping" Obama on trade.

Two big issues helped Barack Obama secure the Democratic nomination, and with it the presidency, in 2008. The first was the Iraq War, which Obama had opposed when his chief rival, Senator Hillary Clinton, was voting to authorize George W. Bush's use of military force. The second was trade policy, which Obama said had gone horribly awry with Bill Clinton's advocacy of the corporate-friendly North American Free Trade Agreement. Although the mainstream media rarely covers trade debates with the seriousness they warrant, Obama understood that this was a critical issue in primary states like Wisconsin and Ohio. He ripped Hillary Clinton for once "talking about how great [NAFTA] was and how many benefits it would bring" and decried "a Washington where decades of trade deals…have been signed with plenty of protections for corporations and their profits, but none for our environment or our workers, who have seen factories shut their doors and millions of jobs disappear."

Obama is still ripping his Democratic colleagues for their stance on trade—but now he's criticizing them for sounding too much like candidate Obama in 2008. As he makes his pitch for "fast-track" authority to close the Trans-Pacific Partnership (TPP) agreement, the president gripes about how his "fellow travelers on minimum wage and on job training and on clean energy and on every progressive issue" are "whupping on me" on trade policy.

COMMENT

Obama claims that the congressional Democrats siding with organized labor, family farmers, and environmental groups are "just wrong" and "making this stuff up" when they warn that the TPP is likely to depress wages, further expand income inequality, and do more to employ international trade lawyers than US workers. He objects especially to Senator Elizabeth Warren's description of how a provision for settling disputes between investors and national governments could undermine US regulations, including the Dodd-Frank reforms to tame big banks and Wall Street. In fact, Warren's concerns mirror those of experts like Lori Wallach of Public Citizen's Global Trade Watch, who has highlighted the threat posed by trade deals that establish "foreign tribunals where investors can 'sue' governments for policies they claim undermine their expectations and demand taxpayer compensation for lost expected future profits." And Warren isn't backing down; she's hitting Obama where it hurts, with a call for him to reveal all of the details of the proposed deal before Congress grants a fast-track authority that would preclude amendments and severely limit debate on any final agreement. "If the president is so confident it's a good deal," Warren said, "he should declassify the text and let people see it before asking Congress to tie its hands on fixing it."

The Senate voted to grant Obama—and the next president—fast-track authority after majority leader Mitch McConnell rallied the GOP and a minority of Democrats to back it. In the House, though, Democrats are overwhelmingly opposed, and the contingent of skeptical Republicans is larger. And even if he gets fast-track, Obama's work is not done, as the final TPP deal will require both House and Senate approval.

Obama's dismissal of his fellow Democrats' concerns on trade harms his own credibility in two ways. First, he's unwilling to declassify the text of an agreement that was negotiated behind closed doors with input from corporations that enthusiastically encouraged its adoption. Second, even for Democrats who are inclined to give this president some leeway, the suggestion that the trade deal's opponents are "making stuff up" denies the experience and insight of progressive critics of free-trade absolutism. The largest and steadiest public-education project on a major economic issue in recent memory has played out over the past quarter-century in union halls, church basements, and community centers across the country, as Americans have wrestled with the promises and realities of trade policy. It's why Obama had to address the issue as part of his 2008 campaign. And it's why the vast majority of House Democrats will not be moved: They know their constituents don't want fast-track or the TPP.

Senator Bernie Sanders—who announced his bid for the presidency on May 26—summed up that experience as he explained his fierce opposition to yet more secretive trade deals. "These folks have been proven wrong time after time after time," Sanders said, noting that trade deals were supposed to be job creators and instead have been a major factor in the closing of some 60,000 American factories since 2000. Now, Sanders added, "the administration says, 'Trust us. Forget about those other trade agreements; the TPP is special. This time, it will be different. This one really will create jobs'—despite the fact that every major organization representing the working people of this country says the exact opposite."

Obama should ask himself why so many of his longtime supporters fundamentally disagree with him on this issue. Instead of suggesting that they're "just wrong," he should listen to people like Keith Ellison, the Congressional Progressive Caucus's cochair and one of Obama's first supporters in Congress in 2007, who has declared: "We cannot afford to rush through another NAFTA that values corporate profits above families."

JOHN NICHOLS

> *The president's dismissal of critics harms his credibility.*

The Irish Rainbow

How gay-marriage activists won a resounding victory.

The night after Ireland's vote counters announced the victory—by a margin of nearly two to one—of a constitutional amendment establishing marriage equality, my daughter and her partner left their Dublin flat to party in the streets with other ecstatic "yes" voters—thousands of lifelong residents alongside throngs of economic émigrés who had flocked back to their birthplace from London or Los Angeles or Seoul or Sydney as part of the unprecedented #HomeToVote campaign. My daughter found herself next to a man so overcome with emotion that he was unable to snap a picture of the occasion. He welcomed her offer to photograph him against the exhilarating backdrop, but couldn't stop his tears.

Ireland's momentous vote is an occasion for worldwide joy. "I wanted to be an equal citizen in my own country, and today I am," exulted Leo Varadkar, the country's first openly gay cabinet member. Conventional wisdom holds that great gains in minority civil rights get imposed from above—by judges, by legislators, by executive order. Even Senator David Norris, so long a warrior for gender equality that he used to be called "the only gay man in Ireland," admitted that he had assumed until recently that justice for his country's LGBT community would have to come through the courts. Yet here were the people of Ireland, by an overwhelming majority, enshrining marriage equality in the national charter, leaping past the other social democracies of Western Europe and the still-ruminating US Supreme Court. How Ireland got here—how this small country, in barely a generation, shook off the tangled legacies of Britain's colonial sodomy laws and Rome's theocratic stigma to emerge as the world standard-bearer for gay rights—is worth both contemplation and celebration.

The huge "yes" vote demolished the conventional dichotomies that even leftists use to describe the Irish public: Catholic versus non-Catholic, young versus old, rural versus urban. This triumph owes a great deal to an unofficial coalition of LGBT activists, millennials, the elderly, overseas citizens who returned home to vote, and members of the clergy—as well as to citizens who fall into none of the above categories.

Take the presumption that the marriage-equality movement belonged to Ireland's cities and cosmopolitan elite. If you wipe Dublin, Cork, and Limerick—Ireland's three largest cities—off the electoral map, the Yes Equality victory is still prodigious: 61 to 39 percent. The campaign won majorities in the most rural, tradi-tion-bound constituencies in the west: Mayo, Donegal, and Kerry, counties with a typically older and more conservative population. And in Roscommon–South Leitrim, the single constituency in which the "no" campaign held a majority, a 2.8 percent swing would have sent this result the other way. Many of the country's rural voters—who, it was once presumed, were herded to the polls by their pastors with instructions on how to cast their ballots—made it plain that they were voting this time with their minds not on the pulpit, but on the lives of their own and their neighbors' children.

As for the church itself, devout Catholics counted among the most fervent supporters of the Yes Equality campaign. Sister Stanislaus Kennedy, the legendary advocate for the rights of the homeless, declared marriage equality "a civil right and a human right." Limerick's Father Iggy O'Donovan proclaimed the value of the "yes" vote: "When we become legislators…as we do when we vote in referendums, we legislate as citizens for all our fellow citizens." Tony Flannery of Athenry, suspended from the priesthood in 2012 for his progressive views, greeted the victory by declaring that "the day of doctrinaire Catholicism is over in this country." Even Dublin Archbishop Diarmuid Martin, who had personally voted "no," told a radio audience: "This is a social revolution…. The church needs to do a reality check."

"I want to leave Ireland better than I found it," one voter said.

Leading this transformation were Ireland's young voters—those under 35—who were children when Mary Robinson, the fiercely eloquent law professor, became the country's first female president just a few years after she'd argued David Norris's case before the European Court of Human Rights, winning the decriminalization of homosexuality in Ireland. The Irish millennials' childhood was a time when leaders of the lesbian and gay communities were invited to President Robinson's official residence, and when Norris went from criminal status to a Senate seat. Many of these millennials would have been taken to visit their country's AIDS Memorial Quilt, on which they could see the names and images of the epidemic's Irish victims, even as many mourners still found it difficult to voice their grief and rage. And they might have heard Robinson on television as she bore outraged witness while standing in killing fields from Central Africa to the Balkans. They would also be familiar with Robinson's pointing out the similarities between the massive suffering and death inflicted upon colonized Ireland by the Great Hunger of the 1840s and the devastation of 1990s Somalia. These young Irish people came of age, in the words of the scholar Luke Gibbons, in "a first-world country with a third-world memory."

The country's 2008 economic crisis, the aftermath of multiple betrayals by political and business leaders, landed like a ballistic missile on the under-35s. Many older Irish people began sensing a connection

COMMENT

equal marriage

62%
Irish voters who said "yes" to marriage equality on May 23, 2015

1
Districts in Ireland (out of 43) in which the marriage-equality measure didn't pass

19
Countries in the world in which same-sex couples can legally marry

2
Countries in the world in which same-sex couples can marry in some regions

62%
US Catholics who supported the legalization of same-sex marriage in a 2013 poll

63%
Americans who said that same-sex couples should have the constitutional right to marry in a 2015 poll

Eric Alterman
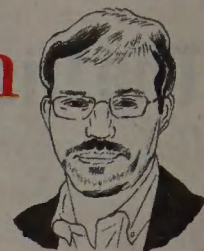
Fool Me Twice

Why is the mainstream media still enabling neocons to twist the truth about Iraq?

Thanks to Jeb Bush's tongue-tied responses to repeated questions about his brother's regrettable record as president, we finally had the "Should we invade Iraq?" debate we needed in 2002. And while "reality" did slightly better this time, the debate demonstrated yet again the power of far-right ideologues to pervert simple and obvious truths about the world in order to evade responsibility for the catastrophes their policies unleashed.

Recall what we were told at the time: "There's no debate in the world as to whether they have those weapons…. We all know that. A trained ape knows that," Defense Secretary Donald Rumsfeld insisted. "This is going to be a two-month war, not an eight-year war," the genial über-hawk William Kristol promised. Vice President Dick Cheney assured us that "we will, in fact, be greeted as liberators." One could supply hundreds more such promises, but let these three stand in for the fact that none of the war's perpetrators and few of its publicists have ever been called to account for the destruction created by their lethal combination of arrogance, ignorance, and incompetence. Nor have they come forward to apologize. Instead, we get excuses, evasions, and more lies.

Now examine the results: nearly $2 trillion spent, hundreds of thousands of people killed, and millions displaced from their homes. Iraq lies in ruins; Iran's regional power has grown; and America stands before the world as not only an imperialist nation but also a lawless one. And then there's the birth of ISIS, a direct result of America's failed strategy to turn Iraq into a vassal state.

Officials in the Bush administration, cheered on by their apologists, manipulated intelligence, tortured those they captured to support their lies, and slandered and mocked those who sought to warn the country away from a predictable catastrophe. (Speaking personally, Bill O'Reilly ran my photo as a mug shot for the crime of mocking Cheney's stupid "liberators" statement, while David Brooks introduced me at a left/right Washington seminar, only half-jokingly, as someone who had just seen his entire worldview implode.)

True, Republicans lost the 2008 election, but this had more to do with Bush's mismanagement of the economy than with Iraq. To this date, our discussions about foreign policy continue as if no one could possibly have known at the time that the Iraq War would turn out to be a disaster. The same faces appear on the same shows calling for the bombing of the same countries. Kristol, who has proven himself to be the wrongest pundit in history, has been rewarded with job offers from ABC News, *Time*, *The Washington Post*, *The New York Times*, Fox News, *The Washington Post* (again) and ABC News (again)—to say nothing of his own weekly-magazine/think-tank empire. (He recently proposed, I kid you not, Dick Cheney for president.)

Part of the responsibility for this sorry situation lies with the Obama administration, which made the strategic decision to paper over all Bush-era political conflict regardless of Republican responsibility or recalcitrance, and therefore explicitly forbade any talk of punishment for war crimes. And despite Senator Patrick Leahy's efforts to demand legal (if not moral) accountability, members of the media proved more than eager to move on as well, especially those within the so-called liberal media. Indeed, just as "liberal hawks" demonstrated their "seriousness" by flacking for Bush's warmongering in the run-up to the Iraq invasion, they assured their credibility within the Beltway in 2009 by agreeing to "get over it."

The blogosphere celebrated when Obama called on a reporter for the Huffington Post at an early press conference; *Time* even said that the president was "making history" by doing so. But recall that brave, historic question: "Are you willing to rule out, right here and now, any prosecution of Bush administration officials?" Typically, Obama said he was "more interested in looking forward than I am in looking backwards," adding that he wanted "to pull everybody together," before he issued a blanket endorsement of "the members of the intelligence community who have done things the right way and have been working hard to protect America."

To this date, our discussions about foreign policy continue as if no one could have known that the Iraq War would turn out to be a disaster.

The issue raised here isn't merely the injustice of it all. Rather, having failed to hold those responsible to

SIEMENS

Capturing more wind, by design.

Siemens wind turbines are designed to meet America's clean energy needs.

At Siemens, we're committed to making wind energy an increasingly important part of America's energy story. We use innovative design and advanced technologies to make wind power more efficient and cost-effective than ever before.

For instance, our unique blade design allows our turbines to capture more wind and produce more electricity. It's innovations like these that are making wind energy a vital part of the U.S. energy mix.

Today, more than 5,000 Siemens wind turbines are producing clean, sustainable power for American homes and businesses

across the nation. And, because our wind turbine blades are manufactured in Fort Madison, Iowa, and our nacelles are assembled in Hutchinson, Kansas, we're also providing local jobs and contributing to economic security. And that unique blade we mentioned? It was digitally designed at the Siemens research facility in Boulder, Colorado.

By designing and manufacturing more efficient and more innovative wind turbines, Siemens is powering America and making things that matter real.

siemens.com/windinamerica

account, we ensure that we'll repeat the same errors in another context. The CIA has already demonstrated its intention to do this with its Nixon-style hacking of computers used by members of the Senate Intelligence Committee, who were investigating the agency's illegal torture program. This is following the lies that then–CIA director Michael Hayden told the committee regarding the agency's wiretapping of US citizens. Like all of the high-level perpetrators of Iraq-related war crimes (but not the brave whistleblowers who revealed them), Hayden walked away scot-free.

Meanwhile, aided not only by Fox News but also by their colonization of much of cable news, talk radio, and even the august Sunday-morning lineup, these same Sabbath gasbags continue to agitate for war after war, while simultaneously insisting that

whatever (eventually) went wrong in Iraq was somehow Obama's fault. One day, they clamor for an attack on Assad in Syria; the next, they demand that we attack Assad's opponents. And virtually every day, we're instructed to attack Iran, by yesterday if not sooner. Neocon apparatchik Joshua Muravchik made the case for war with Iran on *The Washington Post*'s op-ed page on March 13, and Bush's UN ambassador, John Bolton, made the same argument in *The New York Times* 13 days later.

Just imagine if the rule proposed by (I think) John Kenneth Galbraith—that economists' present predictions should only be printed alongside their past predictions—were applied to prowar pundits and politicians. They might not be in jail, but at least they'd be out of work… Except, of course, on Fox. ∎

Having failed to hold the perpetrators of Iraq-related war crimes accountable, we ensure that we will repeat the same errors elsewhere.

---

between their increasingly outspoken children and the bold young authors of the 1916 Proclamation, which sparked Ireland's transformation from imperial outpost to sovereign state. The proclamation announced the new republic's revolutionary aspiration "to cherish all the children of the nation equally." When Mary McAleese, another former president, announced her support for marriage equality, she did so not only as an activist barrister who for 40 years had striven to dismantle "the architecture of homophobia," but as a parent of twins—one gay and one straight—who would have vastly different legal protections. One elderly man in the village of Castletownroche told a reporter that he was casting a "yes" ballot because it would likely be the last vote of his life, and "I want to leave Ireland better than I found it."

Ireland remains a place of intimate, person-to-person retail politics. The country is small enough so that people know one another, even if at a remove: It's hard to defend exclusionary policies when you see their consequences landing on a teacher's mother or a colleague's father or a teammate's brother or an employee's daughter. In the Yes Equality campaign, thousands of young people brought their families to the polls; Trinity College students organized a "Ring Your Granny" phone initiative along the lines of Sarah Silverman's "Great Shlep," which encouraged young Jews to go to Florida and urge their grandparents to vote for Obama.

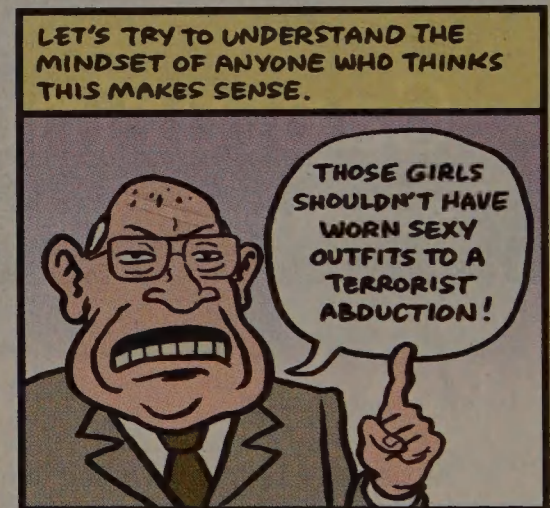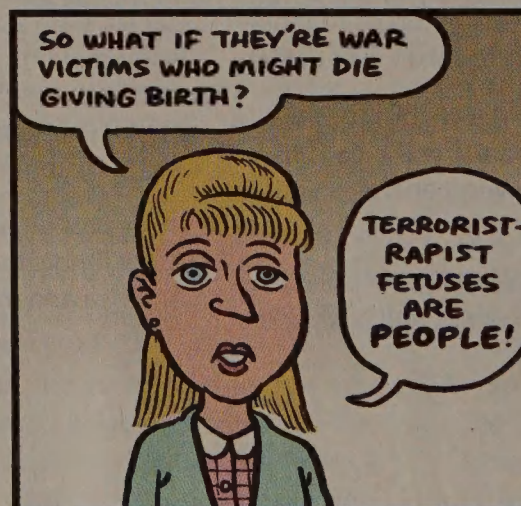As *Irish Times* columnist Noel Whelan

put it, the Yes Equality movement is "the most extensive and effective civic society campaign ever seen in Irish politics." The country's major political parties all found ways to support it, to gain by association, but they could neither own it nor control it. The "yes" vote's most enduring legacy

may be, as writer Fintan O'Toole said of this extraordinary event, that "Ireland has redefined what it means to be an ordinary human being."   MARGARET SPILLANE

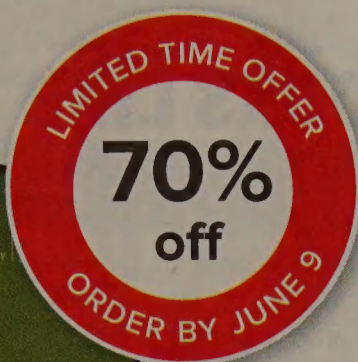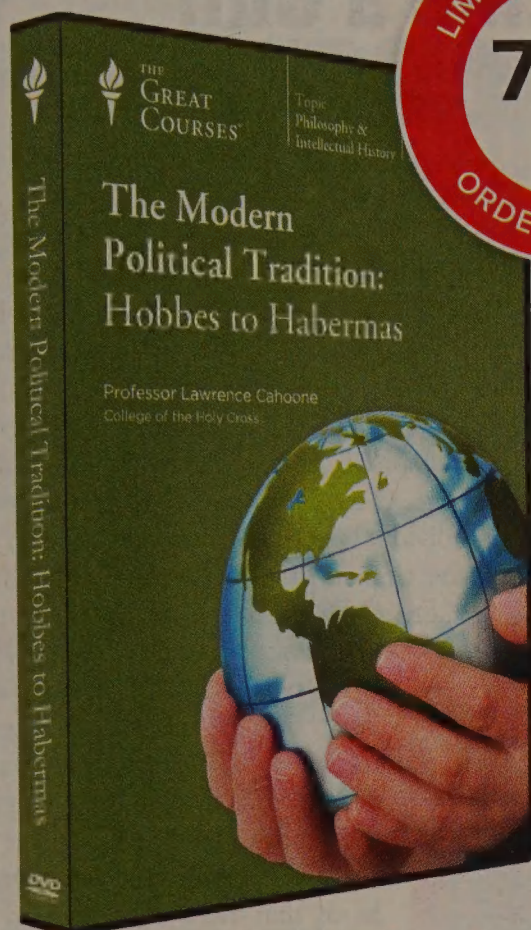*Margaret Spillane, a longtime* Nation *contributor, is a painter and writer who teaches at Yale University.*

COMIX NATION   JEN SORENSEN

Patricia J. Williams

Everything Looks Like a Gun

The impossible legal logic of the Cleveland police-shooting opinion.

On May 23, Cuyahoga County Judge John O'Donnell exonerated Cleveland policeman Michael Brelo, who had been charged with voluntary manslaughter in the deaths of Timothy Russell and Malissa Williams. The facts of the case, as recounted in the judge's lengthy opinion, are these: Russell and Williams were driving in a 1979 Malibu when, at about 10:30 on the evening in question, they were stopped by an officer who says that Williams shouted out the window, "What the fuck did we do this time?" In O'Donnell's less-than-coherent description, the officer then "decided not to pursue the stop, which he initiated after Russell turned left without a signal because he had seen Russell do a possible drug deal a few minutes earlier outside the nearby men's homeless shelter." That officer "returned to his duties without telling anybody else of the encounter."

Moments later, and two miles on, Russell and Williams were driving past a police station when two officers standing outside heard a sound they thought was gunfire and gave chase—a chase that lasted 22 miles, involved speeds exceeding 100 miles per hour, and was joined by 62 police cars and over 100 officers. As expressed in bulletins along the way, the police thought that "two black males" were in the car, that one was "pointing a gun out the back window" and then "possibly loading a weapon." It's worth underscoring that all of these assumptions were wrong. No proof of a drug deal was ever produced. The occupants of the car were a man and a woman. The sound that the officers heard was apparently the Malibu backfiring, since both Russell and Williams were unarmed.

The chase finally ended when Russell drove down a dead-end street—or, in Judge O'Donnell's evocative words, "down a road that, seen from above, looks like the barrel of a gun. Russell raced into that gun barrel…." It's worth noting that the entire world is often unreasonably gun-shaped to those who spend too much time with weapons. For example, the officers acquitted in the beating of Rodney King—also after a car chase—described his body as being "cocked" like a gun even when he was lying bloodied and broken-boned on the ground. As the police converged on Russell and Williams, they fired 137 shots, 49 of which came from Officer Brelo's gun. The final 15 were discharged when

he leaped on the car's front hood and shot directly at them through the windshield.

The legal logic that was to come brings to mind a study conducted by law professors Dan Kahan, David Hoffman, and Donald Braman after a black man was run off the road by the police and left paralyzed in 2001; he lost a controversial lawsuit against the department six years later. The researchers, in studying the divided public opinion about who was at fault, concluded: "We attribute these divisions to the psychological disposition of individuals to resolve disputed facts in a manner supportive of their group identities."

Judge O'Donnell was certain about fault—or, at least, who wasn't at fault. He wrote that Brelo had acted "out of conformity with police training," was in a fit of passion or rage incited by his belief that he was in imminent danger, and that he "knowingly" fired shots that indisputably could have killed either Russell or Williams. But O'Donnell went on to say that there were so many officers firing that it was impossible to show that the deaths "were caused by Brelo's bullets specifically."

In coming to this conclusion, Judge O'Donnell invoked an analogy first posited by Justice Antonin Scalia in the 2014 case *Burrage v. United States*: "Consider a baseball game in which the visiting team's leadoff batter hits a home run in the top of the first inning. If the visiting team goes on to win by a score of 1 to 0, [everyone] would agree that the victory resulted from the home run. By contrast, it makes little sense to say that an event resulted from…some earlier action if the action merely played a nonessential contributing role in producing the event. If the visiting team wound up winning 5 to 2 rather than 1 to 0, one would be surprised to read in the sports page that the victory resulted from the leadoff batter's early, non-dispositive home run."

In reading O'Donnell's comparison of Brelo's deadly volley to a "non-dispositive home run" in a sporting event, I wondered how universally applicable this might be. When rival biker gangs in Waco, Texas, fired hun-
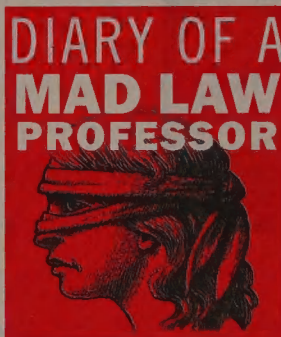
> *The entire world is often unreasonably gun-shaped to those who spend too much time with weapons.*

DIARY OF A MAD LAW PROFESSOR

AT YOUR SERVICE

Two robots, known as Xiaolan and Xiaotao, deliver food at a new restaurant in Jinhua, China. Over the past several years, a number of eateries have opened across China that feature robots working not only as waiters, but also as chefs, hosts, and bartenders.
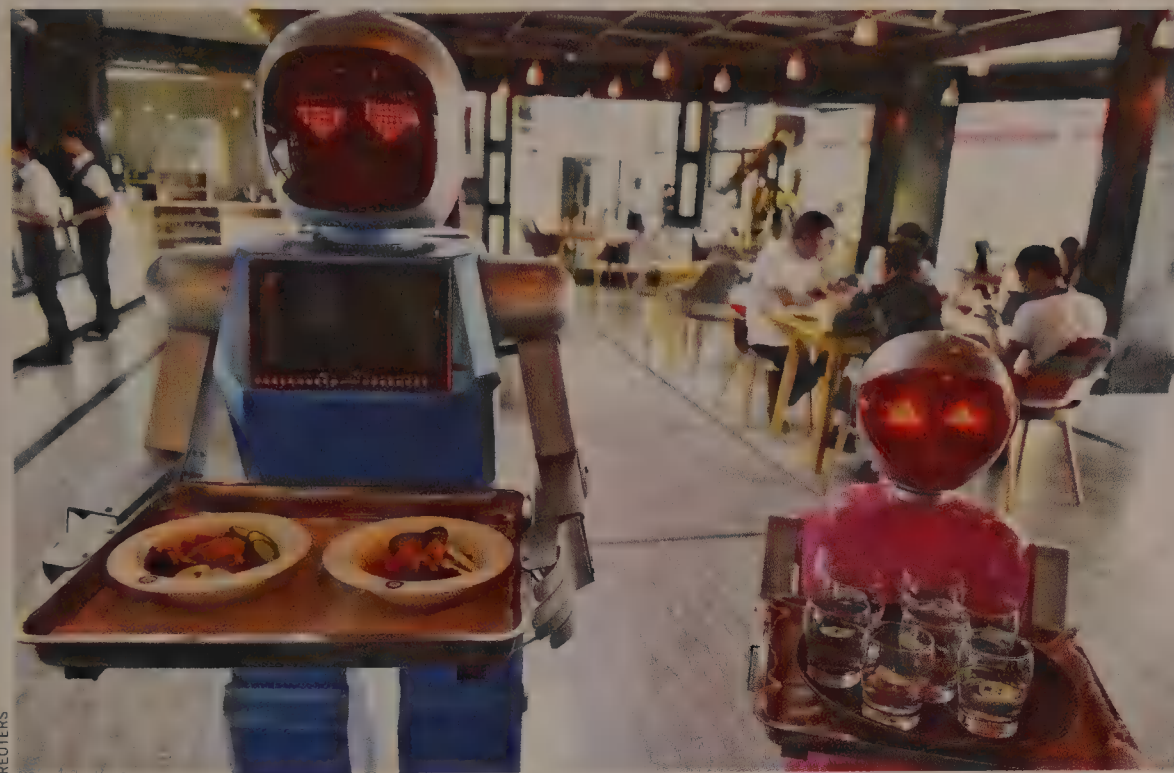
FIORINA TALKS. IOWA SWOONS. WILL IT LAST?

—Front-page head, *The New York Times*

Calvin Trillin
Deadline Poet

The folks went wild for Fiorina.
In Iowa, they'd never seen a
More perfect GOP Athena—
Not Palin, in that same arena,
Nor Eva, down in Argentina.
Though called by Jesus Christ's subpoena,
She's snarky as a trapped hyena.

Her rivals, though, think folks should know
How she got bounced as CEO.

Technology vs. Chicanery

The *Nation* has been thinking about the political implications of new technologies for 150 years. Consider this 1865 editorial about the laying of the transatlantic telegraph:

"The cable may be the cord that is to bind nations together in a closer friendship than they have ever yet known, and be, indeed, a link in the chain of events that is to secure peace on earth and good-will to men.

"Should it be successful...what a revolution it will work in many of the doings of men!"

The changes would largely be "in favor of honest dealings," *The Nation* thought, with "private mercantile affairs" most improved. "When all men are put on an equal footing of intelligence as to prices and markets, the advantages that used to come from private advices, or even from saga-cious guesses, will disappear, and all fair traders have equal chances. Good judgment and practical experience will not be as liable as now to be outstripped by cunning and chicanery. Some kinds of enterprise, indeed, will suffer a sea-change from this submarine whispering-gallery. Adventurous spirits who love to deal with the property of other men as if it were their own, will find their wings singed and their flights checked.... The newspapers will have their share in these telegraphic overturnings, and whether it will be for their advantage or not remains to be seen."

—Richard Kreitner

dreds of rounds at each other, leaving nine dead, 18 hospitalized, and 170 arrested, are we to anticipate the perpetrators' mass exoneration because it's just too hard to figure out who fired the bullets that actually killed someone? (The defendants in that case have already been charged with conspiracy under laws governing organized crime, and a massive forensic investigation is under way so that murder charges may be brought.) Judge O'Donnell put it this way: "Nor is it realistic to think that my conclusion will incentivize a group of police officers to fire as many bullets from as many officers as possible at a suspect in the hopes of obscuring the ultimate cause of the suspect's death. The events of November 29, 2012 are sui generis and not likely to recur."

I hope so. But there are plenty of people who believe that Russell and Williams "had it coming," that they "needed killing," according to some online pundits. There are others who believe that they committed "cop-assisted suicide," and that the police were not the responsible agents of their death. And, of course, there are those who believe that the cops' error-riddled perceptions of Russell and Williams were not the result of overreaction or poor training, but rather a sensible response to the existential-future-threat-imagined-as-immediate-possibility that life on "the mean streets" presents generally. As philosopher Brian Massumi says of the operative logic of such an existential threat: "Because the threat's futurity is firmly held in the present, it short-circuits its own effect. It self-deters. This does not mean it ceases to operate as a cause. It means that its causality is displaced. It is no longer in a position to realize its original effect, annihilation." ∎

THE NEW CYBERSECURITY ELITE

by TIM SHORROCK

As members of a new surveillance class move in and out of government, our spooks move with them, generating profit for the corporations responsible for national security.

$100

SUPERIOR

ABOUT A YEAR AGO, I WANGLED A MEDIA INVITATION TO A "LEADERSHIP DINNER" IN NORTHERN Virginia sponsored by the Intelligence and National Security Alliance. INSA is a powerful but little-known coalition established in 2005 by companies working for the National Security Agency. In recent years, it has become the premier organization for the men and women who run the massive cyberintelligence-industrial complex that encircles Washington, DC.

The keynote speaker was Matthew Olsen, who was then the director of the National Counterterrorism Center (NCTC). He used his talk to bolster the morale of his colleagues, which had recently been stung by the public backlash against the NSA's massive surveillance programs, the extent of which was still com-

ing to light in the steady release of Edward Snowden's huge trove of documents. "NSA is a national treasure," Olsen declared. "Our national security depends on NSA's continued capacity to collect this kind of information." There was loud, sustained applause.

One of those clapping was a former Navy SEAL named Melchior Baltazar, the CEO of an up-and-coming company called SDL Government. Its niche, an eager young flack explained, is providing software that military agencies can use to translate hundreds of thousands of Twitter and Facebook postings into English and then search them rapidly for potential clues to terrorist plots or cybercrime.

It sounded like the ideal tool for the NSA. Just a few months earlier, Snowden had leaked documents revealing a secret program called PRISM, which gave the NSA direct access to the servers of tech firms, including Facebook and Google. He had also revealed that the NSA and its British counterpart, the GCHQ, had special units focused on cracking encryption codes for social media globally.

SDL's software is perfectly designed for such a task. It might be useful, say, for a team of SEALs on a covert operation trying to make sure their cover wasn't blown by somebody on social media—something that almost happened when an alert Twitter user in Pakistan picked up early signs of the secret US raid on Osama bin Laden's compound. And, of course, we don't know the extent to which the NSA could deploy it.

In any case, the software, SDL boasts, is "securely deployed on-premise, behind the firewall, at over 75 government organizations, including the Department of Defense and the Intelligence Community." No wonder Baltazar was at the INSA event, rubbing shoulders with the kings and queens of the intelligence-contracting industry.

THIS SMALL COMPANY, AND INSA ITSELF, ARE vivid examples of the rise of a new class in America: the cyberintelligence ruling class.

These are the people—often referred to as "intelligence professionals"—who do the actual analytical and targeting work of the NSA and other agencies in America's secret government. Over the last 15 years, thousands of former high-ranking intelligence officials and operatives have left their government posts and taken up senior positions at military contractors,

Companies like SDL Government, and INSA itself, are vivid proof of the rise of the new cyber-intelligence ruling class.

Tim Shorrock is a Washington-based investigative journalist. He is the author of Spies for Hire: The Secret World of Intelligence Outsourcing.

consultancies, law firms, and private-equity firms. In their new jobs, they replicate what they did in government—often for the same agencies they left. But this time, their mission is strictly for-profit.

Take Olsen, who served as general counsel for the NSA and as a top lawyer for the Justice Department before joining the NCTC. He is now the president for consulting services of IronNet Cybersecurity, the company founded last year by Army Gen. Keith Alexander, the longest-serving director in the history of the NSA. The firm is paid up to $1 million a month to consult with major banks and financial institutions in a "cyber war council" that will work with the NSA, the Treasury Department, and other agencies to deter cyberattacks that "could trigger financial panic," Bloomberg reported last July.

Some members of this unique class are household names. Most cable-news viewers, for example, are familiar with Michael Chertoff and Michael Hayden, two of the top national-security officials in the Bush administration. In 2009, they left their positions at the Justice Department and the NSA, respectively, and created the Chertoff Group, one of Washington's largest consulting firms, with a major emphasis on security.

Other members are unknown except to insiders. Sam Visner, whom I wrote about in a 2013 *Nation* article about NSA whistleblowers, is in this latter group. A former executive at the giant contractor SAIC, he was hired by Hayden in 2000 and tasked with managing the NSA's privatized (and disastrous) Trailblazer program, which was outsourced to (who else?) SAIC. He returned to SAIC in 2003, then moved on to the government tech firm Computer Services Corporation, which not only manages but owns the NSA's internal-communications system. For most of the last six years, as the cyberintelligence industry grew by leaps and bounds under Obama, Visner was running CSC's massive cybersecurity program for the government.

Hardly a week goes by in Washington without a similar transition. In March, *The Washington Post* described cybersecurity law as "the latest hot job in the Washington revolving door." Robert Mueller, the recently retired director of the FBI, had just joined the national-security law practice of WilmerHale. One of his latest tasks? Advising Keith Alexander as he tries to tamp down con-

ILLUSTRATION BY **CURT MERLO**

gressional outrage over his decision to hire two NSA officials, one of whom planned to work simultaneously for IronNet and the agency (he later withdrew).

Well, enough, you might say: Isn't this simply a continuation of Washington's historic revolving door?

The answer is no. As I see it, the cyberintelligence-industrial complex is qualitatively different from—and more dangerous than—the military-industrial complex identified by President Eisenhower in his famous farewell address. This is because its implications for democracy, inequality, and secrecy are far more insidious.

It is not new for American defense policies to be shaped by and for the 1 percent. Throughout US history, diplomatic and national-security officials have come directly from the ruling elite, and more often than not they have served those interests while in office. Allen and John Foster Dulles, the brothers and law partners who headed the CIA and the State Department during the Eisenhower administration, were classic examples, running multiple operations to support their own clients.

The Eisenhower era also saw the advent of retired generals moving into industry. In 1956, the radical sociologist C. Wright Mills published *The Power Elite*, a groundbreaking study of the institutions through which the corporations of his day wielded political and economic power. Mills was particularly disturbed by the spectacle of multinational companies appointing prominent generals to their boards. Among those who had traded in their uniforms for big business, he found, were some of the great heroes of World War II: Douglas MacArthur (Remington Rand), Lucius Clay (Continental Can), and Jimmy Doolittle (Shell Oil).

This "personnel traffic," Mills wrote, symbolized "the great structural shift of modern American capitalism toward a permanent war economy." It was a prescient analysis, but Mills was talking only of generals; the idea of high-level government officials going into the military business was unthinkable at the time.

The next several decades saw the rise of private security companies and consultancies run by former CIA and FBI agents. Once, in the early 1980s, I was startled to find myself seated next to William Colby, the notorious former CIA director, at a seminar on the Panama Canal. He was there representing a consortium of Japanese construction firms. And, of course, in 1982 Henry Kissinger walked away from his years as national-security adviser and secretary of state to start a corporate consulting firm that remains one of the most powerful in Washington.

Even as Cold War officials increasingly drifted toward the corporate world, there was one line they rarely crossed: Until the 1990s, taking positions at defense contractors was considered unseemly. Then came Frank Carlucci, a former CIA deputy director who served as national-security adviser and defense secretary during Ronald Reagan's second term. Within weeks of retiring, he had joined the boards of no fewer than nine major corporations, including three important military contractors.

This was too much for Caspar Weinberger, a former Bechtel executive who was Carlucci's predecessor at the Pentagon. "Generally, I would not think it appropriate to serve on the board of a company that had extensive

> **The power that the cyber-security class wields is exponentially greater than that of its Cold War predecessors.**

The Chertoff Group was cofounded by George W. Bush's second director of homeland security weeks after Obama's inauguration.

The strangest boast in former NSA director Michael Hayden's corporate CV: that he oversaw the creation of a notorious domestic-surveillance program.

contractual relationships with the department, particularly not if they had those relationships while I was in office," he told a reporter at the time. "Cap is entitled to his own preferences," Carlucci sniffed in response. He went on to chair the Carlyle Group, the private-equity firm that had become the nation's ninth-largest defense contractor by 2001.

WITH THE END OF THE COLD WAR, CARLUCCI's way became the norm. Intelligence and defense budgets were cut after the collapse of the Soviet Union, and thousands of CIA and NSA officers left government for positions with defense contractors. Demand for them grew during the Bosnian War, as the military and its intelligence agencies began hiring private companies to do work historically carried out by the state.

Among them was Halliburton, the Texas oil-services and logistics firm. In 1995, after retiring as George H.W. Bush's defense secretary, Dick Cheney became the CEO of Halliburton. Over the next five years, he transformed the company into one of the world's largest military contractors. Around the same time, the elder Bush was hired as a senior adviser to the Carlyle Group. By the time Cheney became George W. Bush's vice president in 2001, outsourcing was official policy, and the migration of senior-level government officials into the defense and intelligence industries was standard practice.

Then came the September 11 attacks, after which untold billions of dollars were poured into intelligence and surveillance. This ushered in the new age.

What we have now is a national-security class that simultaneously bridges the gap between private and public, merging government careers with jobs as corporate executives and consultants. By retaining their security clearances, many of its members have access to the most highly guarded intelligence, which they use to the benefit of their corporate and government clients. The power they wield is exponentially greater than that of their Cold War predecessors.

To see the difference, let's take a closer look at the Chertoff Group and its best-known executive, Michael Hayden. Chertoff founded his consultancy in March 2009, barely two months after President Obama's inauguration. The group's cofounder was Chad Sweet, who had served as Chertoff's chief of staff at the Department of Homeland Security (DHS) and had earlier worked in the CIA's National Clandestine Service. In effect, the pair re-created the national-security team that had provided much of the intelligence advice to Bush and Cheney, and they said as much in their literature. According to the firm's website, the Chertoff Group provides "business and government leaders with the same kind of high-level, strategic thinking and diligent execution that have kept the American homeland and its people safe since 9/11."

When Hayden came on board in April 2009, he emphasized continuity. "After serving for decades at the highest levels of the U.S. military and the U.S. intelligence services, I grew accustomed to working alongside remarkably talented and dedicated professionals," the former NSA director wrote. "I wanted an opportunity to

Melchior Baltazar — CEO and president (2013-)

Patrick Dowd

Personal lawyer (2014-), partner at WilmerHale

Robert Mueller — Director (2001-2013)

Contractor (2014)

Federal Bureau of Investigation

Various roles; now chief technical officer (1996-)

Keith Alexander

Founder and CEO (2014-)

President, consulting (2014-)

Director (2005-2014)

Contractor? (unconfirmed)

SDL

National Security Agency

Contractor

General counsel for NSA (2010-2011)

Matthew Olsen

Director of NSA (1995-2005)

Board member (2011-)

Contractor

Senior acquisition executive (2002-2003)

Michael Hayden

Director of CIA (2006-2009)

Central Intelligence Agency

Various roles (1958-2005)

Advisory council (2015-)

Principal (2009-)

Cofounder, executive chairman (2009-)

Michael Chertoff

Secretary (2005-2009)

Principal (2009-)

Chief of intelligence (2005-2007)

Charles E. Allen

Cofounder (2009-)

Chief of staff (2007-2009)

Department of Homeland Security

Principal (2009-)

Chad Sweet

Deputy secretary (2008-2009)

Paul Schneider

re-create the experience in the private sector." And he did just that. One of the firm's early recruits was Charles E. Allen, a legendary intelligence official who had recently served as director of intelligence for Chertoff's DHS. Another principal with extensive NSA experience is Paul Schneider, Chertoff's deputy secretary at DHS; from 2002 to 2003, he was Hayden's senior acquisition executive at the NSA. That would have put him in charge of all of the NSA's hugely expensive contracting, which exploded during Hayden's reign from 1999 to 2005.

With other hires, Hayden created a kind of shadow NSA at the Chertoff Group. But this isn't his only gig. He has also joined the boards of Motorola Solutions (a key NSA contractor) and Alion Science and Technology (likely one as well). Strangely, Hayden's bio on the Alion website touts his role in domestic surveillance: "Under his guidance as the Director of NSA, the domestic telephone call database was created to monitor international communications to assist in locating terrorists."

The Chertoff Group doesn't disclose its clients. But one of its most important functions for both the state and its contractor allies is as a broker of mergers and acquisitions. These aren't just "deals"; they also represent significant reorganizations within the intelligence community, which is 70 percent contracted and, like any other industry, requires centralization. Using its team of NSA, CIA, and DHS veterans (who have deep classified knowledge of their agencies' contracting histories and future needs), the Chertoff Group has brokered dozens of deals through its subsidiary, Chertoff Capital. Its areas

Hayden created a kind of shadow NSA at the Chertoff Group.

of focus include cybersecurity, intelligence and data analytics, defense technology and "Development and Diplomacy ('Soft Power')." You get the picture.

Another way the cyberintelligence elite exerts undue influence is through the media. Matthew Olsen, the former National Counterterrorism Center director and IronNet president, recently joined ABC News as a commentator. Hayden is a fixture on cable news, where he regularly extols the greatness of the NSA and its vast surveillance capabilities. Look into any "national-security analyst" on television, and you'll find a member of this class. Watch carefully: Few of them ever diverge from the company (or NSA, or CIA) line. Worse, the networks rarely disclose these conflicts of interest.

Meanwhile, members of this dual public/private class rub shoulders at places like INSA, where they often meet behind closed doors to discuss classified programs. And even while making millions of dollars through their contracting and consulting gigs, these former officials advise the same agencies they profit from. Olsen, for example, was just named to the DHS Homeland Security Advisory Council. It's a cozy, closed, and very profitable world.

S O WHAT DOES THE EXISTENCE OF SUCH A CLASS mean? First off, it deepens inequality. We all know that corporations can buy access to lawmakers through hefty political donations. Now they have access to some of the state's most closely held secrets. According to a declassified document obtained in April by *The New York Times*, Hayden and Alexander were

"read into" Stellar Wind, the warrantless-surveillance program started after 9/11. They are bound by law not to divulge those secrets. But their knowledge based on those secrets is of unfathomable value to the corporations they advise on cybersecurity and acquisitions strategies. That knowledge isn't shared with the public, but it is available to the companies that can afford it.

Second, it places participatory democracy at risk. The vast majority of Americans are excluded from the consequential discussions that take place at the cyber-intelligence elite's secret meetings. While hashing over controversial programs such as domestic spying, offensive cyberintelligence operations, or FBI terrorist-entrapment programs, the state and corporate leaders at INSA—as well as other places where the new class meets—operate on a completely different plane from the rest of us. Meanwhile, the black hole of secrecy keeps the new hybrid class and its organizations immune from any meaningful oversight by either the executive branch or Congress.

To penetrate this shield, there's a great need for more reporting and whistleblowing about the pernicious role of contractors in national security. Unfortunately, only a few journalists have explored the world of privatized spying. And strangely, virtually none of the documents leaked by Edward Snowden have focused on the corporate elephant that so clearly dominates the surveillance jungle. As far as I've been able to track, only one or two of the Snowden documents actually mention contractors.

One was released in 2014 as part of a *Der Spiegel* story on the NSA's extensive collaboration with the German intelligence agency BND. The 2005 document identified an NSA code name as the "coverterm [sic] representing NSA's contract with Computer Services Corporation (CSC) for mission support. All publicly available information regarding work on this contract…will be sanitized so that no association with NSA will be made." This document has yet to be mentioned by either the Intercept or *The Washington Post*, the largest recipients of the Snowden trove.

In his many public appearances since 2013, including in the film *Citizenfour*, Snowden himself has played down his relationship with Booz Allen Hamilton, which employed him during his time with the NSA. Tom Drake, one of the whistleblowers who exposed the agency's corrupt relationship with SAIC and Booz Allen and worked as a senior executive at the NSA until 2008, told me in April that Snowden most likely never had possession of the NSA's contracts. Because Snowden was an infrastructure analyst, Drake said, "he wouldn't have had access to that." Contracts, he added, are stored in a "completely different system."

But whether they come from Snowden or another whistleblower, documents on the contractor role at the NSA and other agencies are essential if we are to understand the totality of US spying programs and the full extent of the threats they pose. To confront the surveillance state, we also have to confront the cyberintelligence ruling class and expose it for what it really is: a joint venture of government officials and private-sector opportunists with massive power and zero accountability. ■

Eleanor Saitta is a security engineer, artist, and writer who works to understand how complex sociotechnical systems fail and redesigns them to fail better. She lives mostly in airports across Europe and the United States and on Twitter as @Dymaxion.

I N THE WAKE OF EDWARD SNOWDEN'S REVELATIONS about government surveillance, Laura Poitras, director of the Oscar-winning documentary *Citizenfour*, and many Internet-freedom activists and security engineers have told the public to trust math—encryption—not politics or law to protect their privacy. Our track record of reining in US surveillance through the law is abysmal: To date, there are no proven instances of a law permanently removing an operational, cost-effective, productive foreign-surveillance capability on human rights or constitutional grounds.

If compelling the NSA to respect human-rights obligations is unlikely, it must be clear how much harder regulating Israel's Unit 8200, Russia's FSB, or the Third Department of the Chinese army's General Staff will be. Americans—not to mention the other 95 percent of humanity—are just as vulnerable to Russian, Chinese, or Israeli surveillance as they are to the NSA's. Even closer to home, domestic abusers, racist law enforcement, and

OOOOO 01110100

CAN ENCRYPTION SAVE US?

The law has failed to protect our privacy again and again. The one area where the NSA has no advantage? Math.

by ELEANOR SAITTA

organized crime also aim to violate individuals' privacy. Much of what the NSA can do now will soon be in other hands. Surveillance technology, like the rest of the digital world, is often adapted for sale to the rest of us.

S URVEILLANCE GETS CHEAPER BY THE DAY. IN THE 1970s, three minutes of voice traffic between New York City and London cost about $40 (adjusting for inflation) for the US government. But by 2005, the rise in Internet calling made conversations so cheap that the cost is difficult to meter—well under a penny—and the cost to monitor them has dropped fast. Intelligence budgets have grown massively over the past 40 years—Australia's, for example, increased a shocking 600 percent—but are difficult to measure because they're classified. But this is nothing compared to the thousand-fold decrease in the cost of collecting information.

Information collected through surveillance has two useful components: the content of communication—what

> **" We kill people based on metadata."**
> —Gen. Michael Hayden, on the CIA's drone program

is said during a phone call, for example—and its context, or "metadata," which includes time, location, and identities. While the former is what we usually think of as surveillance, it's often less revealing. Take a sudden burst of SMS traffic between two coworkers who have never previously communicated on their personal phones, followed by a set of calls to an abortion clinic and a PayPal transfer between them six weeks later. The content of the communication adds relatively little to the story. Despite resistance from analysts worried about their careers and (much) wasted money, the past 20 years have seen the deployment of automated analysis systems on the communications metadata of most of the world in an attempt to keep up with the flood that NSA surveillance has unleashed. It's unclear if the intelligence from these efforts is accurate or useful, but as the former director of the NSA, Gen. Michael Hayden, said in reference to the CIA's drone program, "We kill people based on metadata."

So, if the law has failed to protect us from giant NSA

sweeps of our metadata, and these operations cost the government little, what can encryption do to help?

ENCRYPTION IS A CATEGORY OF MATHEMATICAL operations in which one string, a key, is used to transform another, the plain text, in an encoded version according to a specific algorithm. Once the text is transformed, reversing the transformation without a key takes tens or hundreds of orders of magnitude longer than the encryption did. A secure, unsurveilled Internet depends on widely shared protocols between different systems—two smartphones, for example, or a smart meter and the local electrical substation—and all secure protocols depend on encryption and related operations. Correctly encrypted content is generally not something that can be spied on. Intelligence agencies are not magic; we have no reason to believe that the NSA boasts mathematical advances relevant to decryption beyond what the unclassified world has.

Intelligence agencies tend to rely on legal coercion of big centralized providers, theft of encryption keys or data from those providers, or taking advantage of errors in security in order to watch the exchanges occurring between systems. Any of these tactics can give them access to the content and metadata of all communications at that provider—even, as we've seen, for giants like Google.

What if all of this data was properly encrypted? If this were the case, the individual communicating hosts would have to be individually compromised. This is an active attack, only feasible against small numbers of targets instead of all of us at once in giant sweeps. The cost and risk of discovery relegates it to high-value targets—exactly the situation we want. Protecting metadata is more complex, but the same pattern applies.

Commercial businesses are already implementing better encryption to protect their information from spying, as seen with Apple's decision to encrypt data stored on iPhones by default and Google's improvements in security between its data centers. However, privacy should be easily accessible for everyone, and most of these changes neither protect communications metadata nor stop companies from snooping on their customers for advertising purposes, which still allows the government to collect data in bulk.

The challenge of protecting the average citizen's metadata is currently best handled by tools like the Tor project, an international network of volunteer proxies with an associated browser and other client software. Tor is used by journalists, activists, domestic-violence victims, and even US government investigators—all groups for whom surveillance can have serious consequences. Tor encrypts traffic and bounces it between several relays, ensuring that the relay a user connects to doesn't know where the traffic is going, and the relay passing the traffic to its final destination doesn't know the source. Decentralized approaches like Tor's, in which security is designed into the system and there is no central party to coerce or subvert, are as necessary a response to surveillance as encryption is.

Tor is a small project, but the resources required to run it are still significant. It grew out of ideas first de-

Intelligence agencies are not magic; we have no reason to believe that the NSA boasts mathematical advances beyond what the unclassified world has.

The best way to protect your metadata is through decentralized, open-source tools like Tor.

veloped inside the US Naval Research Labs, and when folks outside of the Department of Defense picked up the project, the Defense Advanced Research Projects Agency, or DARPA, decided it was worth funding as basic research. The code for Tor is open-source (meaning anyone can read and copy it) and thoroughly reviewed, and the operating relays are independent, so the Net-freedom community at large generally doesn't worry about this arrangement. Not all government funding is so unproblematic, but alternatives are hard to find.

EXACT NUMBERS ARE HARD TO COME BY, BUT globally, the intelligence activities of governments and corporations consume hundreds of billions of dollars. The cost to protect individuals and communities from surveillance is also hard to estimate, but such projects are funded primarily by grants from NGOs and the State Department—a tiny fraction of the money spent by governments and corporations, and hardly enough to cover all of the necessary work on this issue around the world, of which Tor is just one small part.

Internet-freedom funders, like all organizations that need to justify their budgets, have a bias toward simple fixes that make good stories—the "there's an app for that" school of countersurveillance. While tools matter, they are large, long-term infrastructural investments that require research and professional support. The current funding model—waving a fistful of checks around and seeing who jumps in with a shiny idea—has resulted in no coherent solutions for defending against mass surveillance, in the United States or globally. Shaping these solutions will require technical competence and long-term vision, not just more money. The changes to infrastructure that we need to protect ourselves from surveillance are a social good, but the decentralized mind-set required does not come naturally to companies or governments.

In the end, the culture change already taking place in the commercial-technology sector will determine whether we live under surveillance or get to retain our privacy. As demonstrated by the reaction of Google engineers to the revelations of NSA spying on their infrastructure, tech workers often understand this, but eventually management must lead. The current advertising-driven business model for many online services depends on capturing massive amounts of personal information in order to target the ads. In addition to being invasive in its own right, this has enabled a lot of government surveillance.

Silicon Valley companies must recognize that the law won't do this work for them, and that if they want to avoid undermining freedom globally, it's time to ditch the dated and dangerous ad model and start building decentralization and content and metadata privacy into everything they create. The result would be a more secure Internet for everyone. Collecting our data would become much more difficult and expensive for the government. We would be able to communicate without worrying that all of our content and metadata was being sorted through by the NSA. As Poitras has claimed, encryption does work, and it's time that we put our faith, and our funding, toward math instead of our battered privacy regulations to keep us safe from prying eyes. ∎

WHAT AMAZON TAUGHT THE COPS

Supply-chain efficiency in the modern police state.

THE FUTURE OF POLICING, IT SEEMS, WILL LOOK A LOT LIKE THE present of policing, just faster and with more math. Instead of using inherent bias and simplistic statistics to racially profile individuals on a street, cops of the future will be able to use complicated statistics to racially profile people in their homes. In the summer of 2013, for instance, the Chicago Police Department implemented a pilot program intended to reduce violent crime. It used an algorithm developed by an engineer at the Illinois Institute of Technology to generate a "heat list" of roughly 400 people who were most likely to become perpetrators or victims of violence. Cops tracked down some of these individuals, showed up at their homes, and warned them they were being watched. Similar programs using technology have been tested in recent years, all under the rubric of what's been called "predictive policing."

This approach has understandably caused concern and outrage among civil-liberties advocates—the very name "predictive policing" sounds like something out of *Minority Report*, just without psychics hanging out in a pool. As Jay Stanley, senior policy analyst at the ACLU, commented about the Chicago program: "Unfortunately, there are all too many reasons to worry that this program will veer towards the worst nightmares of those who have been closely watching the growth of the data-based society."

These are real concerns. It's easy to imagine how biased data could render the criminal-justice system even more of a black box for due process, replacing racist cops with racist algorithms. That said, the cases in which police attempt to predict individual behavior based on data analysis are still relatively rare among the many approaches that have been shoehorned under the heading of predictive policing. Thus far, in fact, predictive policing has been less *Minority Report* than *Groundhog Day*—that is, yet another iteration of the same data-driven policing strategies that have proliferated since the 1990s. As it's currently implemented, predictive policing is more a management strategy than a crime-fighting tactic. Whether it works is perhaps not as useful a question as who it works for—its chief beneficiaries aren't patrol cops or citizens, but those patrol cops' bosses and the companies selling police departments a technical solution to human problems.

PART OF PREDICTIVE POLICING'S IMAGE PROBLEM IS that it doesn't actually have a very clear image to begin with. When a police department declares that it's using predictive policing, it could be doing a whole range of things that vary greatly in their technical sophistication, effectiveness, and ethical concerns. The term itself came into fashion thanks to a 2009 symposium organized by William Bratton, who at the time was the police chief of Los Angeles, and the National Institute of Justice. Following the symposium, the NIJ distributed a series of grants that funded predictive-policing research by universities and pilot programs with several police departments, including in Los Angeles.

by INGRID BURRINGTON

It's easy to imagine how biased data in predictive-policing programs could replace racist cops with racist algorithms.

Ingrid Burrington is a writer living in New York.

The NIJ funding led to a partnership between the LAPD and Jeffrey Brantingham, an anthropologist at the University of California, Los Angeles, who was studying the use of predictive modeling techniques for forecasting civilian deaths and counterinsurgency activities in Iraq. Brantingham's research, which began in 2006, had been funded partly by grants from the Army Research Office. By 2009, when he began working with the LAPD, he'd apparently determined that data-driven urban warfare wasn't all that different from data-driven policing. In 2012, Brantingham turned his research into PredPol, the software and company perhaps most associated with the public's understanding of predictive policing.

PredPol's aggressive marketing created plenty of buzz (and plenty of controversy), but the logic behind predictive policing isn't new. Data-driven policing has been standard practice for at least two decades. Compstat—a management strategy developed under Bratton in 1994, during his first stint leading the NYPD—helped form the ideological foundation of predictive policing, and the academic research and development behind the strategy existed well before 2009.

Robert Cheetham is the CEO of the civic-tech company Azavea and chief architect of its predictive-policing software, HunchLab. In 1997, he was hired fresh out of graduate school as part of a two-man team building crime-mapping software for the Philadelphia Police Department. "We were hired at a time when no one in senior staff cared if we were there or not," Cheetham notes. That changed six months later, when the city hired John Timoney, who had been first deputy commissioner of the NYPD under Bratton, as its new police commissioner. Upon arriving in Philadelphia, Timoney immediately pushed to implement Compstat—and to ramp up support for the crime-mapping tools that Cheetham was building. (Timoney went on to export the Compstat model and other questionable policing tactics to Miami as well, and since 2012 he has been a consultant to the government of Bahrain.)

Cheetham got inspired to build what would become HunchLab after watching Philadelphia cops work with weeks-old Compstat data. He created an early prototype in 1999, shortly before leaving the department, and eventually built the first iteration of HunchLab in 2006, with the support of a National Science Foundation grant.

HUNCHLAB AND PREDPOL WORK IN SIMILAR ways. Both build on the already common practice of crime-mapping. Police departments perform statistical analyses of historical and recent crime data to predict the likelihood of crimes (in most cases, limited to property crimes) within a certain geographical area. Officers are given maps each day as

EXTERNAL
VIEW OF EYE

guides for recommended places to patrol. Among other statistical tools, HunchLab adds a technique known as "risk-terrain modeling" that incorporates multiple additional data streams, including things like proximity to bars and local events, to determine the likelihood of crime in an area. The developers of both programs are quick to point out that they don't use demographic or socioeconomic data about neighborhoods.

Whether any of this works to reduce crime is, of course, the general public's main concern. But the answer remains unclear—in part because the majority of reports on the use of predictive policing have come from police departments and PredPol, which both have a stake in seeing positive results. The NIJ has funded the RAND Corporation to conduct analyses of two of its grantees, in Shreveport, Louisiana, and Chicago. The complete reports are forthcoming, but the preliminary analysis of Shreveport's program, released in November, suggests that it's too soon to tell if the technology works, or how well it works in conjunction with what police officers already do.

But there's a deeper problem with measuring the success of algorithmically determined criminal justice: All of these applications assume the credibility of the underlying crime data—and the policing methods that generate that data in the first place. As countless scandals over quotas in police departments demonstrate, that is a huge assumption. Kade Crockford, director of the ACLU's Technology for Liberty Project, describes much of what predictive policing offers as a "tech-washing of racially discriminatory law-enforcement practices" that, even in its most supposedly unproblematic forms, is merely "tinkering around the edges [of the criminal-justice system] and calling it revolutionary reform."

While police chiefs may champion that supposedly revolutionary reform, it doesn't appear to have a huge impact on the cops working under them. The average cop is unlikely to concede that a computer's data-driven knowledge is superior to his or her street knowledge. In Cheetham's experience, most officers want tools that are easy to use and that "make sense against personal experience"—and, accordingly, they expect the highlighted areas of the maps they're given to change over time and reflect their actions. To the extent that predictive policing's forecasts can reinforce patrol cops' observations, it's a useful tool. But for many cops, it's also an irrelevant one. The majority of their day is spent responding to calls or being directed by a dispatcher; if they get around to patrolling the red square on their department-issued map, it's in their limited downtime.

Cheetham did, however, describe enthusiastic feedback from senior staff and management, who appreciated the software's ability to more precisely allocate officers' time. In one city using HunchLab (a city Cheetham couldn't name, due to a nondisclosure agreement), the police department gets GPS feeds from patrol cars to measure the amount of time that officers spend in HunchLab's "mission areas" and to assess the impact of the patrol. The appeal of predictive policing as a micromanagement tool harks back to Compstat, where arrest numbers have become a tool for police

Due process is inefficient. There is a word for law enforcement that emphasizes efficiency over humanity: It's called fascism.

Jeffrey Brantingham leveraged his research on data-driven urban warfare to help create the predictive-policing program PredPol.

William Bratton, in his first stint with the NYPD, pioneered data-driven policing with his Compstat system in 1994. Predictive policing adds a high-tech twist to this familiar tactic.

accountability—if not to the public, then certainly to district commanders.

It's telling that one of the first articles to promote predictive policing, a 2009 *Police Chief Magazine* piece by the LAPD's Charlie Beck and consultant Colleen McCue, poses the question "What Can We Learn From Wal-Mart and Amazon About Fighting Crime in a Recession?" The article likens law enforcement to a logistics dilemma, in which prioritizing where police officers patrol is analogous to identifying the likely demand for Pop-Tarts. Predictive policing has emerged as an answer to police departments' assertion that they're being asked to do more with less. If we can't hire more cops, the logic goes, we need these tools to deploy them more efficiently.

CIVIL-LIBERTIES WATCHDOGS SHOULD CERTAINLY decry predictive policing's potential harm, but it's unrealistic to assume that algorithms give police officers powers they don't already have. Cops haven't previously needed multivariate logistic regressions, risk-terrain modeling, or algorithmic heat lists to violate civil liberties or murder with impunity. They've just needed a badge. Predictive policing does little to change street-level power dynamics, but it does have the potential to increase the power that police management has over cops on the street—and as recent events in Ferguson, Missouri, and New York City demonstrate, the tendency toward micromanagement too often leads to more petty arrests in pursuit of revenue and quotas.

It's also misleading at best for police departments to cast the future as a choice between more software and more patrol officers. To begin with, both demands ignore the fact that crime rates in the United States remain dramatically low; it's unclear why more of anything is required. Furthermore, neither option addresses the chief grievances of officers or the citizens they're supposed to protect. Ironically, one of the biggest wastes of financial resources and time for public safety in America is the "war on drugs"; making its implementation more efficient is akin to making a Rube Goldberg machine move slightly faster. Decriminalization, on the other hand, frees up a lot of resources.
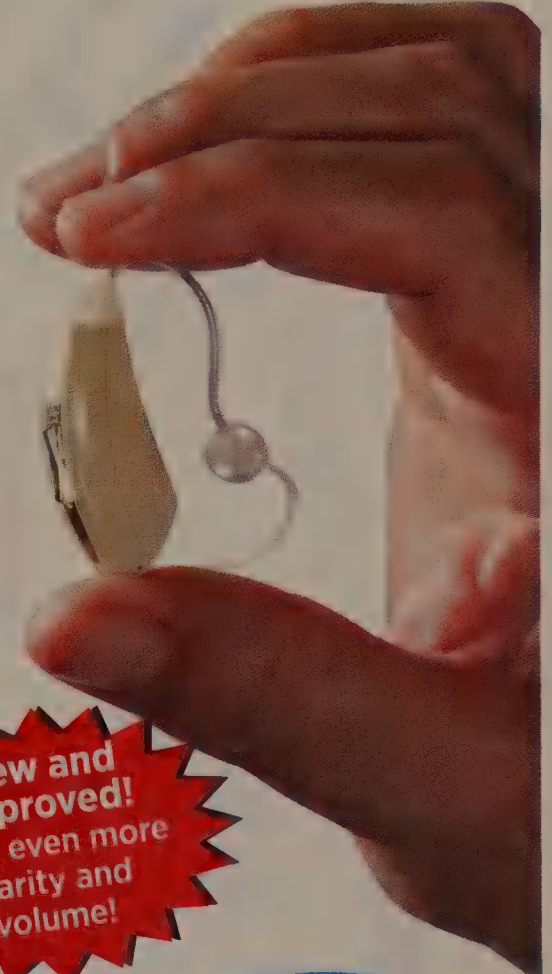
More to the point, activities that might improve police and community relations and allow for deeper investigations—for example, more time for cops to talk to people, or training that encourages them to treat people like human beings—are deliberately and by necessity inefficient. Due process is inefficient. Things that improve quality of life and are generally thought to decrease an individual's likelihood of committing crimes—things like access to education, housing, food, and healthcare—are also pretty inefficient. There's a word for law enforcement that emphasizes efficiency over humanity: fascism.

If indeed police departments are expected today to do more with less, perhaps that should actually mean more training, more public accountability, and less micromanagement in the service of perpetuating terrible policing dynamics. ∎

by **ASTRA TAYLOR** and **JATHAN SADOWSKI**

*A billion-dollar industry is sweeping up the massive data
trails we leave online. What are marketers doing with them?*

DIGITAL REDLINING

NICOLE KEPLINGER, 22, HAD LONG SEEN ADS ON FACEBOOK PROMISING FINANCIAL RELIEF, BUT SHE ALWAYS ignored them and assumed that they were scams. Keplinger was drowning in student debt after obtaining a worthless degree from the for-profit Everest College, whose parent corporation, Corinthian Colleges Inc., had recently collapsed under accusations of fraud and predatory lending. But when an offer arrived in her e-mail inbox in April—"Cut your student loan payment or even forgive it completely!"—she thought it seemed more legitimate than the rest, so she called the number.

The person on the other end was aggressive. "They wanted my banking information, my Social Security number, my parents' number and their information. I was like, 'Wait a minute,'" Keplinger recalled. Even after she said that she lived on a fixed income (on disability due to a kidney transplant), the telemarketer kept up the pressure. "They said I needed to get a credit card. I don't know if they were going to take money off it or what... but why do I need to get a credit card if I'm trying to reduce my student loans?"

Keplinger lied and said she'd call back, but not everyone gets away. If she disclosed her bank information, her loans most certainly would not have been cut or forgiven. At best, she would have been charged a large fee for something she could do herself: get on government repayment programs such as forbearance or deferment. At worst, she might have had the money debited each month from her bank account without any benefit provided in return, or been ensnared by a "phantom-debt collector"—a distressingly common racket that involves telling people they owe phony debts and scaring them into paying. It's the perfect ploy to attempt on people who have already been preyed upon by unscrupulous outfits like Corinthian and who, having been misled and overcharged, are understandably confused about how much money they owe. At the same time, the fact that Keplinger was e-mailed in addition to seeing ads on Facebook suggests that her information was in the hands of a "lead generator," a multibillion-dollar industry devoted to compiling and selling lists of prospective customers online.

Welcome to a new age of digital redlining. The term conjures up the days when banks would draw a red line around areas of the city—typically places where blacks, Latinos, Asians, or other minorities lived—to denote places they would not lend money, at least not at fair rates. "Just as neighborhoods can serve as a proxy for racial or ethnic identity, there are new worries that big data technologies could be used to 'digitally redline' unwanted groups, either as customers, employees, tenants, or recipients of credit," a 2014 White House report on big data warns.

Thus, rather than overt discrimination, companies can smuggle proxies for race, sex, indebtedness, and so on into big-data sets and then draw correlations and conclusions that have discriminatory effects. For example, Latanya Sweeney, former chief technologist at the Federal Trade Commission, uncovered racial bias on the basis of Google searches: black-identifying names yielded a higher incidence of ads associated with "arrest" than white-identifying names. It's discrimination committed not by an individual ad buyer, banker, or insurance broker, but by a bot. This is likely what happened to Nicole: Facebook's huge repository of data has strong indicators of users' socioeconomic status—where they attend school, where they work, who their friends are, and more—and the company targets them accordingly. In May, Facebook and IBM announced a partnership that will result in the two tech giants combining their vast data troves and analytics in order to achieve "personalization at scale."

The authors of this article saw this firsthand when one of us (Astra) opened a second Facebook account to communicate with Corinthian students: Her newsfeed was overrun by the sorts of offers Nicole sees regularly—in stark contrast to the ads for financial services, such as PayPal and American Express, that she normally gets. Such targeting isn't obvious to most users, but opening a new profile and associating primarily with students from a school known to target low-income people of color, single mothers, veterans, and other vulnerable groups cracks a window onto another Facebook entirely.

LONGSTANDING CONSUMER PROTECTIONS SHOULD, IN PRINciple, apply to the digital landscape. The use of data-driven methods for judging people's creditworthiness goes back a century. Before the passage of the Fair Credit Reporting Act in 1970, consumer-reporting bureaus would gather information on everything they could find about people—whether true or fabricated, fair or unfair, relevant or irrelevant—and then provide it to creditors. Your dossier was likely to contain whatever information they could get away with collecting or making up about you. So, if you were considered a sexual deviant, a drunk, a troublemaker, an adulterer, or whatever else, it was all fair game if a creditor was willing to pay for that information. The FCRA was meant to limit these practices by putting an end to the collection of "irrelevant" information and establishing rules for the "permissible" uses of consumer reports. In 1974, Congress passed the Equal Credit Opportunity Act, which added more bite to financial regulations by making it illegal for creditors to discriminate against applicants on the basis of race, religion, national origin, sex, marital status, age, or receiving public assistance. Cases brought under ECOA have often focused on the presence of human bias in making credit decisions—think of an African-American woman walking into a lender's office and receiving unfair rates based on her race or gender.

Of course, the days when creditworthiness was assessed in one-on-one meetings are long gone. Today, lenders, employers, and landlords rely on credit-scoring systems like the widely used FICO score, which take data from an individual's consumer report and derive a metric of his or her risk. These scores allow for automated decision-making, yet there's evidence that such systems have not eliminated bias, but rather enshrine socioeconomic disparities in a technical process.

Though deeply flawed, credit scores and consumer reports are immensely consequential in many facets of our lives, from obtaining a loan to finding a job to renting a home. The lack of a score—or a lower score than one actually deserves—can mean higher interest rates within the mainstream banking system, or being forced into the arms of check-cashing services and payday lenders. Scores can become "self-fulfilling prophecies, creating the financial distress they claim merely to indicate," as legal scholars Danielle Citron and Frank Pasquale have observed. The worse your score, the more you're charged—and the more you're charged, the harder it is to make monthly payments, which means the worse you're ranked the next time around.

With the sheer quantity of data that can be collected online, FICO scores are just the tip of the iceberg. "Now the system has exploded, where you've got all these actors that you don't actually

have a relationship with: network advertisers, data brokers, companies that are vacuuming up information," says Ed Mierzwinski, consumer-program director at the United States Public Interest Research Group (USPIRG). This information comes from sources both online and off-line: Thousands of data brokers keep tabs on everything from social-media profiles and online searches to public records and retail loyalty cards; they likely know things including (but not limited to) your age, race, gender, and income; who your friends are; whether you're ill, looking for a job, getting married, having a baby, or trying to buy a home. Today, we all swim in murky waters in which we're constantly tracked, analyzed, and scored, without knowing what information is being collected about us, how it's being weighted, or why it matters—much of it as irrelevant and inaccurate as the hearsay assembled during the early days of consumer reporting.

Making things even more muddled, the boundary between traditional credit scoring and marketing has blurred. The big credit bureaus have long had sidelines selling marketing lists, but now various companies, including credit bureaus, create and sell "consumer evaluation," "buying power," and "marketing" scores, which are ingeniously devised to evade the FCRA (a 2011 presentation by FICO and Equifax's IXI Services was titled "Enhancing Your Marketing Effectiveness and Decisions With Non-Regulated Data"). The algorithms behind these scores are designed to predict spending and whether prospective customers will be moneymakers or money-losers. Proponents claim that the scores simply facilitate advertising, and that they're not used to approve individuals for credit offers or any other action that would trigger the FCRA. This leaves those of us who are scored with no rights or recourse. While federal law limits the use of traditional credit scores and dictates that people must be notified when an adverse decision is made about them, the law does not cover the new digital evaluation systems: You are not legally entitled to see your marketing score, let alone ensure its accuracy.

The opacity and unaccountability of online consumer-credit marketing negatively affect not only those individuals who get a bad deal or financial offer; there is evidence that these personalized predatory practices played a role in the subprime-mortgage bubble and subsequent financial crisis. "From 2005 to 2007, the height of the boom in the United States, mortgage and financial-services companies were among the top spenders for online ads," write Mierzwinski and Jeff Chester in a scholarly article on digital decision-making and the FCRA. Companies like Google, Yahoo, Facebook, and Bing make billions a year from online financial marketing. Lead generation specifically "played a critical, but largely invisible, role in the recent subprime-mortgage debacle." Since 2008, when the crash occurred, the capabilities for tracking and targeting have become only more sophisticated.

Proof of discrimination in online microtargeting is notoriously hard to come by. How can you tell if you're being targeted with an advertisement for an inferior or bogus financial product because data brokers have deemed you part of the "rural and barely making it," "probably bipolar," or "gullible elderly" market segments? Or if you're being offered a jacked-up interest or insurance rate based on your race, gender, neighborhood, or health condition? Or whether you're receiving offers for a subprime financial product because a marketing score flags you as a risk, or you've been caught in a lead generator's snare?

"Measurement is an enormous challenge," says Aaron

> **"You see one ad and I see another. It's often impossible for a researcher to find out why."**
> —Aaron Rieke of Upturn, on measuring bias in online targeting

Astra Taylor is the author of The People's Platform: Taking Back Power and Culture in the Digital Age. *Jathan Sadowski is a PhD candidate in the human and social dimensions of science and technology at Arizona State University.*

Rieke of Upturn, a technology-policy-and-law consulting firm. "You see one ad and I see another. It's often impossible for a researcher on the outside to find out why. Maybe an ad buyer ran out its budget. Maybe we were profiled differently. Maybe the ads were geotargeted."

To date, the best indication of potentially discriminatory practices is the marketing literature and public boasting that companies produce themselves. A recent white paper on "Civil Rights and Big Data, and Our Algorithmic Future," which Rieke helped write, contains a prime example: "At an annual conference of actuaries, consultants from Deloitte explained that they can now use thousands of 'non-traditional' third party data sources, such as consumer buying history, to predict a life insurance applicant's health status with an accuracy comparable to a medical exam." The company does this partly by incorporating the health of an applicant's neighbors.

A S MANY AS 70 MILLION AMERICANS DO NOT have a credit score, or have low scores due to "sparse" or "thin" files. A variety of start-ups are trying to exploit this situation under the banner of magnanimously extending credit to individuals facing a disadvantage under the traditional financial model. They do this by bulking up consumer credit files—crunching large amounts of data and feeding it into proprietary scoring formulas. The data comes from traditional sources (such as credit reports) and what some experts call "fringe alternative data," which can include information about shopping habits, web and social-media usage, government records, music tastes, location, and just about anything else. The new big-data-fueled techniques are the innovative ingredients needed to "disrupt" the traditional business of consumer finance and "innovate" different types of products and services.

ZestFinance, which declined to be interviewed or comment for this article, leads the pack with a troubling motto emblazoned on its website: "All data is credit data." LendUp, an online lender that specializes in short-term, small-dollar, high-interest credit—like the kind offered by payday lenders, pawnbrokers, and title loans—targets people without access to other forms of credit who need fast cash to make ends meet. On the other side of the socioeconomic spectrum, Earnest—another venture-capital-backed lending start-up—proclaims that it's trying to "build the modern bank for the next generation, and the mission is better access to credit to millions of people at earlier ages and at cheaper prices—and we do that using software and data," according to Louis Beryl, the CEO and founder. The project was born out of Beryl's difficulty in getting a loan as a Harvard graduate student: Earnest caters to middle-class college graduates and offers them low rates (anywhere from 4.25 to 9.25 percent for personal loans) and personalized customer service.

These start-ups all tell very similar stories—common in Silicon Valley—about using technology to benefit their target population, this time through expanding opportunities for financial inclusion. But given the sky-high rates that some of them offer—the annual interest rate for loans offered by LendUp and other similar big-data lenders ranges from 134 percent to 749 percent—

they seem little more than high-tech loan sharks. But while traditional loan sharks can only get people who walk through their door, online creditors and marketers have an enormous (and unsuspecting) population at their fingertips online. In myriad ways, these companies represent the ongoing shift of power away from consumers and the erosion of longstanding protections, yet there has been little regulatory scrutiny. "In addition to whether they're covered by the laws," says USPIRG's Mierzwinski, "there is also the question of whether some of their algorithms are trying to evade the laws by creating illegal proxies—and that's absolutely something that we're hoping the [Consumer Financial Protection Bureau] can use its supervisory authority to figure out."

OFFICIALS WE SPOKE TO FROM THE CFPB PAID tribute to innovation when asked about the potential impact of digital technologies on fair lending. But while there's no denying that big data, new credit-scoring models, and financial-services start-ups could be beneficial, in theory, for disadvantaged communities, market incentives in practice ensure that stigmatization and exclusion prevail.

Scoring systems are technologies of risk management, and new digital data collection and micro-targeting further shift the risk—and expense—to those who are most vulnerable. For example, compare Earnest and LendUp. The former shows how big data can be used to benefit consumers—but for Earnest, the risk is only worthwhile when dealing with a subset of people whose privilege and financial soundness have yet to be recognized by the mainstream banking system. The latter reveals the more common and exploitative uses of big data to entangle a financially insecure population with few, if any, alternatives available to them.

As the digital revolution unfolds, already limited consumer protections will come under increasing stress. Both the Consumer Financial Protection Bureau and the Federal Trade Commission lean on the FCRA and ECOA, yet plenty of evidence suggests that new, expanded safeguards are needed, given the laws' limits and loopholes. That said, both the CFPB's assistant director of fair lending, Patrice Ficklin, and the FTC's Julie Brill insist that current laws are up for today's challenges. "Whether they're a large bank or a small start-up, it is illegal for lenders to discriminate against consumers," Ficklin says.

No doubt, the laws currently on the books provide crucial protections—but experts and advocates warn that they don't take into account the disparate impacts of the new technology. For example, it's not illegal for companies to discriminate based on a potential customer's or employee's personal network—the people they know and the interests they share with others online. "The legal fight against discrimination (or, rather, the legal fight for equality) may be a long distance from the fight to safeguard ordinary people—and especially members of historically marginalized groups—from encountering unfairness and injustice due to data-driven discrimination," says Seeta Peña Gangadharan, a researcher focused on data profiling and inclusion.

Given this fact, more fundamental reforms are needed.

> **"There is also the question of whether some of their algorithms are trying to evade the laws."**
> —Ed Mierzwinski of USPIRG

Brill, for one, has been extremely vocal about the need for more robust privacy protections in the form of data-broker regulations that curb data collection at the source. "I think that we need to give tools to consumers so that they can control their information used for marketing, to suppress it or correct it if they want," Brill says. "I want to add, though, that I don't think consumers can manage all of this on their own. And that's why there need to be some rules around sensitive information—for instance, health information, information about race, financial status, geolocation. If that's going to be used, consumers need to be told, and they need to say, 'Yes, OK, you can use it.'"

In other words, we need to move from an opt-out model, where the default setting makes our private information freely available to thousands of invisible and unaccountable actors, to one that's opt-in—a move that would inevitably constrict the flow of private data. This is what Brill calls the "right to obscurity," a right that will become even more essential as more and more everyday devices get networked through the so-called "Internet of things." (Imagine a future in which your auto insurer collects data from a device in your vehicle; this data, because it isn't acquired through a third party, isn't covered by the FCRA, and consumers have no right to access or correct the information.)

Data brokers and marketers, not to mention advertising-dependent tech giants like Google and Facebook, would not be pleased if such legislation came to pass. Lobbying associations like the Consumer Data Industry Association would no doubt spend huge sums to squelch any reforms, invoking their First Amendment right to use the data for whatever purpose they please, and arguing that advertising and scoring are tantamount to speech, and privacy equivalent to censorship. In his book *The Black Box Society: The Secret Algorithms That Control Money and Information*, Frank Pasquale points out that some lawyers are even using First Amendment cases "as a shield to protect credit rating agencies accused of wrongdoing during the subprime debacle."

Strong data-broker legislation or, better yet, a baseline, cross-sector privacy law would be an enormously positive (if unlikely) development in the United States. Even so, the frame of privacy/obscurity needs to be expanded. Consider Nicole Keplinger again. When she and other for-profit-college students are targeted by scammers on Facebook, the problem isn't simply that their privacy has been violated through the collection of personal information. The fact that they are treated as quarry by financial predators raises a deeper issue of fairness. Even in a scenario in which privacy protections are strong, data brokers regulated, and the FCRA and ECOA aggressively enforced, there would be no restrictions against targeting people who are poor. Discriminating based on income is as American as apple pie: Unlike race, religion, sex, or marital status, class is not a protected class.

Right now, many people insist that a combination of digital technology and the free market will solve the problem of financial inclusion, even though it's a problem caused by the market itself. Perhaps the very concept of "consumer protections"—which inevitably leads to individualized solutions to systemic failures—is part of the problem. Looking back on the role that online consumer-credit marketing played in the 2008 crash, it's clear that consumer protections are in fact citizen protections. Nothing less than the health of our entire society is at stake. ∎

WE'RE WATCHING YOU WORK

Labor is fighting employers' broken utopian dream of a perfectly efficient—and totally surveilled—workforce.

BY JESSICA BRUDER

FOUR YEARS AGO, I WAS OUT JOGGING WITH AN old friend when she told me a puzzling story: Her longtime UPS driver had just reappeared after more than a monthlong absence. He'd been hospitalized for stress, she told me.

Stress? How stressful could that job be? So I asked to meet him.

Over coffee, the deliveryman, whom I'll call Bill (he asked to remain anonymous for fear of retaliation from the company), explained that United Parcel Service had been upgrading its systems for tracking employees. Now the truck he drove was full of sensors. They reported when he opened the bulkhead door. When he backed up. When his foot was on the brake. When he was idling. When he buckled his safety belt. A high-resolution stream of data, including all that information and his GPS coordinates, flowed back to the UPS offices. The system is called "telematics."

With more than 15 years on the job, Bill already knew how to follow classic UPS protocols, with names that sounded like dogma from a productivity-worshipping cult: "The Five Seeing Habits," "The Ten-Point Commentary," "The 340 Methods." Guidelines derived from time-and-motion studies told him the most efficient way

Jessica Bruder is an award-winning journalist whose work focuses on subcultures and the dark corners of the economy.

to do everything: how to handle his ignition key, which shirt pocket to use for his pen (right-handed people should use the left pocket, and vice versa), how to pick a "walk path" from the truck, and how to occupy time while riding in an elevator.

But telematics ratcheted up that pressure. Now drivers were called to account for a litany of small sins. They were asked to justify bathroom breaks and any other deviations—"stealing time" in corporate-speak—that could chip away at their SPORH (pronounced "spoor") count, or Stops Per On-Road Hour.

"I have no problem doing a heavy, hard job," Bill told me. "But now, after you do the job, you have to look back every day and say, 'Did I do this? Did I do that?' They have a report that tells them everything that you did wrong. For instance, if you turned the truck on before you put on your seat belt, that's wasting gas."

For UPS, whose revenues topped $58 billion in 2014, tracking worker productivity goes straight to the bottom line. Time is money, and management knows exactly how much: "Just one minute per driver per day over the course of a year adds up to $14.5 million," the company's senior director of process management, Jack Levis, told NPR last year. He appeared on a boosterish episode of

the *Planet Money* podcast titled "The Future of Work Looks Like a UPS Truck." Levis and other UPS executives have a favorite quip: "We've moved from a trucking company that has technology to basically a technology company that just happens to have trucks."

But UPS trucks aren't driven by robots—at least not yet—and of the 10 current and former drivers I've interviewed, all felt like they were handling packages in the Panopticon. "Data is just a proxy for control," said Sam Dwyer, 26, a former screenwriter and marketing-industry analyst who spent eight months as a driver last year.

A current driver, who also asked to remain anonymous for fear of getting fired, said: "It's like you're fighting for your job every day. They harass you: 'Why did it take you 10 minutes here? Why did it take you this long there?'… They want you to hate your job and quit so they can hire somebody at half the pay."

The metrics-based harassment of workers is common, said Tim Sylvester, the president of Teamsters Local 804, when I visited his Long Island City union hall in March. He told the tale of one UPS driver, Domenick DeDomenico, who spent 10 days in a coma after getting hit by a car while delivering packages. A year later, after surgery and extensive physical therapy, DeDomenico

> ❝ **We've moved from a trucking company that has technology to basically a technology company [with] trucks.** ❞
>
> —Jack Levis, senior director of process management for UPS

was back on the job. When the tracking data indicated that he'd dipped below his pre-accident delivery rate of 13.23 packages per hour, managers threatened to fire him, DeDomenico said at a union rally.

Some UPS supervisors post printouts of drivers' data every day to keep up the pressure. "Guys get scared," said Josh Pomeranz, Local 804's in-house counsel. "They start cutting corners." According to Pomeranz, knee and back surgeries are very common among UPS workers. One driver lodged a protest by posting a telematics-inspired parody of "Santa Claus Is Coming to Town" on YouTube. (Sample lyrics: "He sees you when you're driving. He knows when you're on break!")

Job stress is a popular topic on BrownCafe, an independent chat board for UPS workers. In two separate forum threads, when some members referred to apparent driver suicides in Atlanta, Georgia, and Paris, Tennessee, others began talking about management pressures. In September, when a recently fired UPS deliveryman in Birmingham shot two supervisors to death before killing himself, forum members speculated about the role played by a pressure-driven corporate culture. "It was just a matter of time before somebody went ballistic," wrote one. Another added: "We are people, damn it, not some stupid metric."

How did we get here? A mere 48 years ago, on his weekly program *The Twenty-First Century*, Walter Cronkite proclaimed: "Technology is opening a new world of leisure time. One government report projects that by the year 2000, the United States will have a 30-hour workweek and monthlong vacations as the rule." Machines, many people thought, would lift the yoke of labor from humanity's shoulders. A *Time* magazine essay predicted that "by 2000, the machines will be producing so much that everyone in the U.S. will, in effect, be independently wealthy."

The pundits had one thing right: Advances in technology did increase national productivity. In the three decades following World War II, productivity and hourly wages grew roughly in tandem, by 97 percent and 91 percent, respectively. Then they were decoupled: Workers produced steadily more and earned proportionally less. From 1973 to 2013, while output rose 74 percent, the average worker's pay rose just 9 percent, according to a January report from the Economic Policy Institute (EPI).

"All the productivity gains have been harvested and turned into corporate profits," explained Michael Childers, the director of the School for Workers at the University of Wisconsin. CEOs now make 296 times as much as the typical worker, according to the EPI; a half-century ago, they made only 20 times as much. Likewise, after-tax corporate profits hit their highest level on record as a share of the GDP in 2013, even as workers' salaries and wages hit their lowest level.

UPS demonstrates perfectly how technology now governs the US workplace. Metrics enable "management by stress," said Childers. Two years ago, he met workers who were processing insurance claims at a Pennsylvania call center, where managers monitored

every conversation and keystroke. They used that data to discipline employees, he said, constantly urging more speed. "If you get a few calls where people speak slowly in a row, you know you're going to hear about it next week," Childers recounted. "Always in the back of your mind as a worker is, 'Oh my God, I wish this person would talk faster.'" The workers' anxiety and exhaustion were palpable: "You had 20-year employees quitting, people throwing up in the parking lot."

In the winter of 2013, Reynalda Cruz, 42, took a job as a FedEx warehouse temp in Edison, New Jersey. She was issued a computerized package scanner and told to strap it to her right forearm. But the weight of the device became unbearable, she said. As she reached repeatedly for boxes that were above her chest level, stacking them on pallets and then wrapping them in plastic, her arm grew inflamed. Coworkers told her this was normal. They counseled her to take a Tylenol or Motrin. Meanwhile, her data-gathering wrist scanner had registered a troubling trend: Her pace was dropping. When supervisors confronted Cruz, she told them she was in constant pain. The same device that was tracking her speed was inhibiting it, too. They urged her to "pick it up," she said.

"At the beginning, when they put it on my arm...I said, 'Oh, wow!' But after the hours went by, I saw this really wasn't good for me at all," she recalled, speaking in Spanish through an interpreter. "How is it human beings can end up working like this? They were measuring our time, our production, as if we were robots." Today, Cruz is an organizer for New Labor, a nonprofit advocacy group representing immigrant workers in New Jersey.

Laura Graham was a seasonal worker last year in Coffeyville, Kansas, at one of the infamous Amazon warehouses. She was born in 1965, when the techno-utopian dream was ascendant, but the workplace she describes, like Cruz's warehouse, is the inverse of those earlier predictions. Every time she scanned a piece of merchandise, another countdown began on her screen, indicating how many seconds she had to reach the next item, as if she'd graduated to the next level in a video game. Her progress toward hourly goals was also tracked. When an accidental trip down a wrong aisle left her more than five minutes behind, a supervisor arrived to scold her. Graham's body rebelled against the demands of the device, which directed how she walked from 10 to 20 miles a day on concrete in the 915,000-square-foot complex for $11.25 an hour. "There's nothing to describe the misery, physically," she said. "I started getting these really sharp pains through my arches...it ended up being plantar fasciitis." Putting new insoles in her shoes didn't help. To cope, she took two ibuprofen tablets halfway through the graveyard shift, which ran from 5:30 PM to 3:30 AM, and another two at the end. On days off, she tried to keep from using her feet, lying in bed except for visits to the bathroom or shower.

AMAZON AND UPS, TWO OF THE MOST SUCCESSFUL companies in the United States, both use technology to drive their workers hard. But there's a big difference: UPS has a union. Amazon does not. As a result, UPS drivers make a decent wage—$18.75 an hour to start, rising to $32 after four

years on the job—and can negotiate for protections. In May 2011, Teamsters across the country began wearing stickers on which UPS stood for "Unfair Production Standards." This was four months before Bill broke into a cold sweat on the job, couldn't breathe, and was rushed to the hospital in the throes of his first panic attack. While the Teamsters' contract with UPS has a clause stipulating that workers can't be disciplined based on telematics data alone, a gaping loophole in that agreement—it's invalid in cases of worker "dishonesty," although the contract doesn't specify what such cases may include—renders such protections toothless. Local 804 representatives said they'd hoped to see more robust language added in the last round of contract negotiations between UPS and the Teamsters, but it didn't happen.

Meanwhile, the pressure to produce more and faster keeps intensifying. Some UPS employees and union reps told me about the tricks workers use to keep up. Drivers have been known to sit on top of already-fastened seat belts to save time. (Recently, they've been getting busted for that, however, since sensors can tell if a seat belt hasn't been unbuckled at a delivery stop.) In one warehouse in Queens, they said, a safety shut-off mechanism had been disabled—someone taped a reflector against the electric eye tracking the conveyor belt—because it meant fewer false alarms stopping production.

And workers are not looking forward to the arrival of a new routing system for drivers—called On-Road Integrated Optimization and Navigation, or ORION—that UPS is rolling out across the country. The company claims it will cut mileage and save $300 million annually. Teamsters elsewhere in the country have called it "telematics on steroids." They worry that it's a new way to erode workers' earning power by dumbing down—or "deskilling"—the job to make them expendable.

If workers are to prevent companies from turning their workplaces into Panopticons, and firing them based on increasingly inflexible metrics, they will have to organize around new types of demands. That means bargaining for very narrow language about what kind of data may be gathered—from e-mail to phone recordings and GPS movements—and setting clear boundaries on how employers can use such information. It also means setting times and places that are off-limits.

This will be a challenge, because unions themselves are under attack. In March, Wisconsin became the 25th "right-to-work" state, enacting anti-union legislation that critics have aptly nicknamed "right-to-work-for-less." Legislators in Missouri and New Mexico may follow suit. In November, a settlement with the National Labor Relations Board required Amazon to post notices in its warehouses stating that employees are free to unionize. When I asked Laura Graham if she planned to work another holiday season there, she said yes. She's applying to one of the company's warehouses in Texas—a right-to-work state since 1993—and expects her experience as a seasonal worker to be pretty much the same as last time.

"A big part of it for me, and the reason I can go back, is psychological: I know I'm only going to be there for two months," she said. "I'll be miserable for two months, and then just call it a day." ∎

> **"You had 20-year employees quitting, people throwing up in the parking lot."**
> —Michael Childers, director of the School for Workers at the University of Wisconsin
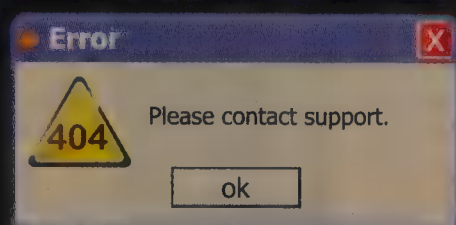
SYSTEM FAILURE
THE HIGH-TECH WAY TO SLASH PUBLIC BENEFITS.

MUNCIE, INDIANA, KNOWN SINCE THE 1920S as the prototypical American "Middletown," recently found itself at ground zero of an experiment in high-tech governance. It would be easy to see Muncie—after a rash of plant closings, a foreclosure crisis, and skyrocketing poverty throughout the first decade of the 21st century—as a ghost of America's industrial past. In fact, it is a canary in the coal mine of our future.

In November 2006, Indiana Governor Mitch Daniels announced a 10-year, $1.16 billion contract with a consortium of tech companies, led by IBM and Affiliated Computer Services (ACS), to modernize and privatize eligibility procedures for the state's Medicaid, food-stamp, and cash-assistance programs. Central to the plan was "remote eligibility": Rather than applying in person at county welfare offices, Hoosiers would submit online applications, fax in supporting documents, and then be interviewed by private call-center employees.

Daniels, who was considered at the time a likely presidential contender, pitched remote eligibility as more than just a technical fix. Throughout the process, he repeatedly called Indiana's welfare system "broken, wasteful, and often fraudulent" and the "worst in America." It was true that Indiana lagged behind other states in reducing its welfare rolls. In the 10 years after so-

by VIRGINIA EUBANKS

Virginia Eubanks is the author of Digital Dead End *and the coeditor of* Ain't Gonna Let Nobody Turn Me Around: Forty Years of Movement Building With Barbara Smith. *She is a Ford Academic Fellow at New America.*

called welfare reform passed in 1996, Indiana's caseloads dropped only 6 percent, compared with 58 percent in the country overall. IBM's system promised to accomplish what legislation had not yet achieved.

The modernization project arrived in Muncie, the largest city in the first pilot area, a year after its launch. System failures were immediate and widespread. Applicants waited 20 or 30 minutes on hold, only to be denied benefits for "failure to cooperate in establishing eligibility" if they were unable to receive a callback after having burned through their limited cellphone minutes. They faxed millions of pages of photocopied driver's licenses, Social Security cards, and other supporting documents to a processing center in Marion, 40 miles away; so many of the documents disappeared that advocates started calling it "the black hole in Marion." If one page among dozens was too dark to read, damaged in transmission, or incorrectly indexed to a case, the application was denied.

Kay Walker, a Center Township trustee, realized that these changes were devastating Muncie families. "They were getting kicked off assistance," she said in March 2015. "They were confused, and they didn't know where to turn. There was no case management, no personal connection, no communication among agencies. It was just the biggest mess."

By February 2008, the number of households receiv-

ing food stamps in Delaware County, which includes Muncie, dropped more than 7 percent, though requests for food assistance had climbed 4 percent in Indiana overall. Calls to the LifeStream 211 telephone hotline requesting information about food pantries doubled. The Second Harvest Food Bank faced severe shortages. Hospitals, nursing homes, and pharmacies failed to receive Medicaid reimbursements. The municipal graveyard complained that it had not been paid thousands of dollars for the funerals of poor and indigent people.

N RESPONSE, WALKER AND HER STAFF ORGANIZED a People's Town Hall Meeting in May 2008. Dozens of public-assistance recipients testified before a packed room of 500 people. Melinda Jones of Muncie, the mother of a 10-month-old with cancer, was fighting to keep her Medicaid and food stamps. "I have to beg and borrow from my family to give my daughter her food," she said, "and I think it's utterly ridiculous that we do our children like this."

Christina King, a diabetic and working mother of three, lost her Medicaid during the modernization. She was unable to afford insulin for seven months, and her blood sugar was out of control, putting her at risk of stroke or coma. "What good does it do when my 7-year-old walks in and I physically cannot get out of bed?" she said. "I spent two days in the ICU because I have no medicine. My kidneys are now at risk. My eyes are at risk. But I get up every day and I go to work, because I think it's important for me to show my kids, 'Don't be dependent on the system. Don't be like me—do better.'"

Deaf, blind, disabled, and mentally ill clients were particularly hard-hit. Modernization materials were not translated into Braille. Applicants in wheelchairs struggled to answer incoming calls from Marion, only to have the caller disconnect before they could reach the phone. "I'm deaf. How can I do a telephone interview?" asked Dionna McGairk through a sign-language interpreter at the town-hall meeting. "I tell [call-center operators] to use my relay service. They don't understand what relay service is." She says the operators told her she needed to get help. "I am saying, 'No—I can answer my questions myself. You are discriminating against the deaf.'"

Ignoring these initial troubles, Indiana rolled the pilot program out to 47 additional counties over the course of that year. By 2009, more than 1 million state residents had lost or been denied access to food stamps, Medicaid, and cash benefits—a 54 percent increase in denials compared with the previous three years—despite the worsening recession, relaxed eligibility rules for federal food stamps, and catastrophic flooding in the region.

Then Governor Daniels did something unexpected: He admitted that the experiment was a failure and canceled the state's contract with IBM, calling the modernization plan a "flawed concept that simply did not work out in practice." IBM asserted that unexpected economic, political, and natural events had doomed its efforts to streamline the eligibility process, and sued the state for breach of contract.

The governor and IBM both blamed forces out of their control for the plan's collapse. But it was easy to

predict that Indiana's modernization effort would fail. An almost identical system had been tried twice before—in Florida in 2004 and Texas in 2005—with similar results.
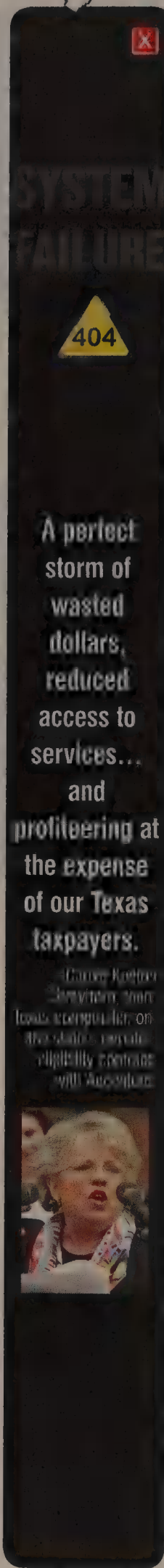
The Florida project replaced caseworkers with online questionnaires, touting the resulting freedom from in-person eligibility interviews. Because many low-income residents lacked an Internet connection in their homes, Florida asked a network of more than 3,000 community partners to provide computer access in their offices; as a result, the state reduced its welfare staff by 40 percent. But according to a 2008 report in *Clearinghouse Review*, a journal covering poverty law and policy, these organizations received little to no funding, training, or oversight in taking over the traditional casework responsibilities of state employees. There were no provisions for dealing with barriers to access due to disability, limited literacy, or limited English proficiency. Many applications were subsequently denied for failure to cooperate, usually as a result of problems with scheduling telephone interviews and faxing documents.

Likewise, the Texas Health and Human Services Commission signed an $899 million contract with Accenture to build a system that computerized eligibility decisions for the state's Children's Health Insurance Program (CHIP), among other programs. Accenture incorrectly terminated 6,000 kids' Medicaid cases, including a 14-year-old Houston boy who died of kidney cancer as a result. After quickly spending $244 million in taxpayer dollars, Texas canceled the two-county pilot program in 2007 and terminated Accenture's contract.

Texas Comptroller Carole Keeton Strayhorn called her state's remote-eligibility efforts a "perfect storm of wasted dollars, reduced access to services…and profiteering at the expense of our Texas taxpayers." Judge David Dreyer of the Marion Superior Court used strikingly similar language in his decision in *State of Indiana v. IBM*. "Neither party deserves to win this case," he wrote. "This story represents a 'perfect storm' of misguided government policy and overzealous corporate ambition. Overall, both parties are to blame and Indiana's taxpayers are left as apparent losers." Even so, he found the state in breach of contract and awarded $52 million in damages to IBM.

N THE WAKE OF THE STUNNING COLLAPSE OF THESE three programs, a bigger question remains unanswered: Can the failures of remote eligibility really be blamed on a "perfect storm" of bureaucratic incompetence, poor contractor performance, and unexpected technical glitches? Or was "welfare modernization" a high-tech Trojan horse concealing a very old-fashioned effort to cut public benefits and lay off public workers? Storms are unpredictable—random acts of nature. Remote eligibility failed for entirely predictable human reasons. Here are three big ones:

1. Casework is crucial. Remote eligibility profoundly changes the relationship between public workers and poor and working people. No longer are caseworkers responsible for families; instead, they're responsible for tasks assigned through a computerized queue. Any available worker can complete the next task, but no single worker ever sees the whole picture of an applicant's life.

A perfect storm of wasted dollars, reduced access to services… and profiteering at the expense of our Texas taxpayers.

"It's all piecework now. We became slaves to the task system," says Fred Gilbert, a retired caseworker who served and supported refugee families in Fort Wayne, Indiana, for more than 30 years. "Like any other private call center, it's 'Just the facts.' But the welfare system is very complicated. That's the job of caseworkers: to help people wade through the mess."

Casework has never been simple. It's a complex human endeavor that relies on relationships, requires a difficult mix of canniness and compassion, and is vulnerable to all the biases about race, class, and gender that are woven throughout our society. And caseworker discretion can cause real trouble: Until the national welfare-rights movement of the 1960s won equal access to welfare programs, for example, white caseworkers used subjective "man in the house" and "suitable home" rules to exclude African-American families from public services. But after the modernization in Indiana, eligibility workers were no longer authorized to take any independent action to help clients get verified for benefits.

2. Volunteers cannot replace government employees. Remote eligibility assumes that low-income families have ready access to the Internet. But even today, according to the American Community Survey, only half of those households making less than $25,000 a year have Internet service at home. The majority of applicants in Indiana relied on a community partner, such as a local library, nursing home, or health clinic, to access electronic applications and learn how to use remote-eligibility programs.

"We had lines of desperate people waiting for help," says Muncie Public Library director Ginny Nilles. As in Florida, community partners in Indiana received little to no compensation, training, or oversight to do what amounted to volunteer casework. Library staffers worked hard but were quickly overwhelmed, and the situation worsened when the state passed a budget that cut library funding by $1 million. Librarians were being laid off, so they trained community volunteers to help patrons submit applications, which created serious challenges.

"The forms ask very personal questions," Nilles explains. "If they couldn't use the computer, it was incumbent on us to read the questions out loud and get the answers: Social Security numbers, mental and physical health. Volunteers are great, but if you pay someone to do a job, it's their responsibility. It's about accountability."

3. The real problem with welfare is lack of access. Just as too much voting isn't the key problem with American politics, too much access isn't the key problem with our welfare state. Only three-quarters of eligible people across the country claim Supplemental Nutrition Assistance Program (SNAP) benefits, even under today's relaxed eligibility requirements. A 2010 Robert Wood Johnson Foundation study showed that, before the mandates of the Affordable Care Act, only 70 percent of Americans eligible for Medicaid were signed up. The problem, in short, is not that too many people are fraudulently claiming welfare; it's that so few people who qualify for public benefits manage to get them, keep them, and use them.

Before its modernization experiment, Indiana ironically fared quite well in getting benefits to those who were eligible. It was 16th among states in food-stamp

participation rates, for example, providing benefits to 74 percent of the people eligible. Indiana also had relatively low fraud and error rates: Only 5.3 percent of food-stamp dollars were spent incorrectly in 2005, according to the state's own statistics.

Florida, Texas, and Indiana all described their modernized systems as paperless, convenient, and cost-effective. Underlying the rhetoric about flexible-access options and administrative efficiencies, however, was a strong focus on eliminating fraud by taking a zero-tolerance approach to application errors. In the long run, the modernized system shifted the administrative burden of documenting welfare eligibility—as well as the blame for errors—from caseworkers to the applicants themselves, the majority of whom are the disabled, the elderly, and children.

THE STATE OF INDIANA AND IBM WENT INTO mediation over their contract dispute in February. But the legal case only seeks to apportion blame and levy penalties. We still haven't answered that bigger question: Was this a system failure? Or was the widespread loss of benefits a predictable—even intentional—outcome?

"The system doesn't seem to be set up to help people; it seems to be set up to play gotcha," said Christopher Holly, a Medicaid attorney in Bloomington, in a December 2014 interview. "In our legal system, it is better that 10 guilty men go free than one innocent man go to jail. The modernization flipped that on its head." In other words, the new system was based on the assumption that it is better for 10 eligible applicants to be denied public benefits than for one ineligible person to receive them.

The design of electronic-governance systems affects our material well-being, the health of our democracy, and equity in our communities. But somehow, when we talk about data-driven government, we conveniently omit the often terrible impacts that these systems have on the poor and working-class people in places like Muncie. But despite their dismal record of failure, new remote-eligibility projects continue to crop up. Xerox acquired Affiliated Computer Services in 2010; rebranded as Xerox Services, the company developed an "integrated eligibility solution" that controls access to benefits and services for tens of millions of people in 37 states.

These systems touch all of our lives, even if they remain invisible to many. According to Mark R. Rank's *One Nation, Underprivileged: Why American Poverty Affects Us All*, the great majority of Americans—65 percent—will use means-tested public assistance at some point. Even for those lucky enough never to need help, the cost of these systems to taxpayers far outstrips the fraud they supposedly prevent. Indiana has already lost more than $500 million—and counting—on its remote-eligibility gamble.

But there's also a larger toll. "There's a cost to people," says Jamie Andree of Indiana Legal Services. "A case might ultimately be resolved in the applicant's favor—after a year! But the cost of just waiting around without Medicaid benefits is enormous; it's really hard to make somebody whole. Most people will stop getting medical care while eligibility is being determined. There's no way to compensate them for that." ∎

Mitch Daniels, then governor of Indiana oversaw a 56 percent increase in benefit denials.

The system doesn't seem to be set up to help people, it seems to be set up to play gotcha.
—Christopher Holly, Indiana Medicaid attorney

SYSTEM FAILURE

404

Letters

@thenation.com

Any serious assessment of the collapse of the New Left must include other pressures, ranging from doctrinal conflicts to FBI infiltration and brutal police harassment. To reduce it to a matter of individual personalities is precisely the type of "he said/she said" reporting that Alterman regularly—and rightly—despises in mainstream political coverage.

Alterman would have benefited from the example of one of his predecessors, a reporter whom he has described as "America's most prominent independent journalist"—the "late, great I.F. Stone." Writing just weeks after the 1970 Greenwich Village townhouse explosion, Stone took a more nuanced position in a remarkable editorial entitled "Where the Fuse on That Dynamite Leads." No apologist for the Weathermen, Stone—unlike Alterman—could nonetheless empathize with the idea of insurrection: "I must confess," he wrote, "that I almost feel like throwing rocks through windows myself."

The point is not to agree with the actions and ideas of the Weather Underground, but only to comprehend the larger context. This is what Stone did, ascribing ultimate guilt to American leaders and their genocidal policies, not to the activists who had been driven to rage—yes, crazy rage—by the results of those policies. "Until the war in Southeast Asia is ended," Stone concluded, "until the Pentagon is cut down drastically, until priorities are revised to make racial reconciliation and social reconstruction our No. 1 concerns, the dynamite that threatens us sizzles on a fuse that leads straight back to the White House."

THAI JONES
NEW YORK CITY

Alterman Replies

Here we go again. Mr. Jones is confused about a few things. In the first place, nowhere did I claim that "a small group of extremists hijacked the entire [antiwar] movement." They did, however, hijack the SDS, and that requires not only understanding—and I explicitly criticized Burrough for leaving out the politics of Vietnam in his analysis—but also condemnation, given their proclivity toward both terrorism and idiocy. Nor did I "reduce it to a matter of individual personalities," though a thorough analysis would address the question of why some antiwar protesters turned to terrorism while the vast majority did not.

I don't blame my late friend Izzy for wanting to throw a few rocks over Vietnam. I'm sure I'd have felt the same way. I would have blamed him, however, had he actually thrown those rocks. Instead, he did his best to tell the truth about what he saw his government doing and put his faith—good "Jeffersonian Marxist" that he was—in democracy rather than revolution.

As for the role of the White House, the FBI, etc., I did not write an essay about US policy in Vietnam or official attempts to subvert the antiwar movement, though I did mention both. Rather, I wrote a column about a bunch of left-wing terrorists whose lunatic actions and arguments had the effect of allowing the opponents of the larger antiwar movement to discredit the honest, peaceful, and democratic opposition. For those who are interested in my views on the larger issues, feel free to read my book (based on my PhD dissertation) *When Presidents Lie: A History of Official Deception and Its Consequences*, which delves deeply into the causes and repercussions of the war, both at home and abroad.

ERIC ALTERMAN
NEW YORK CITY

Books & the Arts.
Glory, Vanity, Liberty?

by DAVID A. BELL

In the spring of 1812, on the eve of commanding more than 600,000 soldiers to invade Russia, Napoleon Bonaparte laid out his plans for the future of Europe. "We need," he told his former police minister, Joseph Fouché, "a European law code, a European high court, a single currency, the same weights and measures, the same laws. I must make all the peoples of Europe into a single people, and Paris, the capital of the world." The French emperor had not previously expressed such vaulting ambitions, but as his empire swelled, he came to believe he could bring the continent a degree of unity that it had not known since the fall of Rome. After falling from power himself in 1815, he frequently referred back to these ambitions, and lamented his failure to create an enduring European superstate.

Was Napoleon, and not the shrewd post–World War II diplomat Jean Monnet, the true progenitor of the European Union? Monnet not only led the effort to establish a European Common Market (something Napoleon also envisaged), but hoped its member states would take further steps toward union. Perhaps he was following a path Napoleon had first blazed. And if so, does Napoleon's legacy help us understand Europe's present-day problems? Thanks to the long string of anniversaries leading up to the bicentennial of the Battle of Waterloo on June 18, the last few years have been overrun by new publications on the man, his campaigns, his empire, and the resistance against him. The list includes, with properly Napoleonic excess, a dozen full-scale biographies published just since the start of the century. Yet as the most recent contributions show with particular force, it remains surprisingly difficult to assess whether the institutions and style of administration perfected by Napoleon were compatible with significant participation by ordinary citizens, and with the preservation of social and cultural diversity. Given how much of the Napoleonic legacy survives in the European Union today, this is not merely an academic question.

David A. Bell is the Lapidus professor in the department of history at Princeton University. His Napoleon: A Concise Biography *will be published this fall by Oxford University Press.*

Napoleon depicted as king of Italy in a painting by Andrea Appiani (1805).

In the Europe of the early 1800s, the ideas that Napoleon outlined for Fouché were in no sense absurd. Over the previous century, European elites had grown remarkably alike. To a surprisingly great extent, they read the same books, listened to the same music, saw the same plays. From Lisbon to St. Petersburg, they had a common second language: French. (As every reader of Tolstoy knows, many Russian aristocrats spoke it in preference to their native tongue.)

As early as 1772, Jean-Jacques Rousseau had commented (implicitly, in reference to elites): "Today, whatever one may say, there are no longer any Frenchmen, Germans, Spaniards, or even Englishmen…there are only Europeans. They all have the same tastes, the same passions, and the same customs."

Political union was a different matter, but by 1812 Napoleon seemed on his way to resolving that issue as well. Over the previous 16 years, as he rose from a general of the French

Republic, to first consul in 1799 and emperor in 1804, his almost unbroken string of victories had enormously swelled France's borders. His empire now included the Low Countries, Catalonia, large portions of Germany and Italy, and even the Croatian coastline. He had tamed much of the rest of continental Europe into a series of satellite states. French rule provoked violent opposition, but not everywhere. In Spain, for instance, there were fiercely anti-French *guerrilla* bands (the word first achieved wide currency during this period), but also the *Afrancesados* (the "Frenchified"), who greeted the rule of Napoleon's brother Joseph as a release from the obscurantist tyranny of the Roman Catholic Church and degenerate Bourbon monarchs.

Of course, Napoleon's European project did not come to fruition. In 1812, he assembled the largest army yet seen in Europe, and led it to almost total destruction in Russia. Despite valiant efforts, he never recovered, and within three years, his European enemies had sent him into exile on the small South Atlantic island of St. Helena. France shrank to its prerevolutionary borders, and the Bourbon dynasty returned to its throne. Yet Napoleon might at several moments have forestalled this course of events—for instance, if he had managed to smash the Russian army early on in 1812 and forced Czar Alexander I to the negotiating table. In that case, some version of the union he envisaged might have become a reality.

It would have been an "enlightened" union, governed according to the principles of rational administration that Napoleon had established in France during the first years of his rule: centralized and bureaucratic, but guaranteeing civic equality to all citizens. It would not have been hugely repressive. Napoleon's forces did commit widespread atrocities during their counterinsurgency campaigns (especially in Spain), and they also engaged in plunder on a titanic scale—all of which led the British press to denounce him as the "Corsican Ogre," and the Russian Orthodox Church to call him the Antichrist. But his empire was nothing like the great tyrannies of the 20th century. It had no concentration camps, no massive internal-security apparatus, and relatively few political prisoners. His projected union would hardly have functioned democratically, though. It would have been run by and for the wealthy elites, and would not have given the peasant millions who still constituted the vast majority of the European population very much say in the matter. Britain would have remained apart from it, in permanent opposition.

Now consider the situation of Europe

today. Its elites may not resemble one another quite so much as they did 200 years ago. Still, they largely watch the same movies and television shows, listen to much of the same music, and even read many of the same books. Thanks to the Erasmus Program, they frequently do part of their university studies in other European countries, and they travel within Europe far more than their predecessors. And from Lisbon to Warsaw, they have a common second language: English. (Some corporations and universities on the continent now function largely in that language.) Europe already has the same weights and measures, and 19 states share the same currency.

Political union is, again, a different matter, but in 2015 Europe has moved closer to it than at any time since 1812. There is a European Parliament and high court, a European Council, Central Bank, and many other institutions. Twenty-eight nations belong to the EU, covering a territory much larger than Napoleon's empire. The EU enjoys popular support in most of these nations. And it is, by the standards of our day, an enlightened union, dedicated to the welfare of its citizens and to the protection of their human rights.
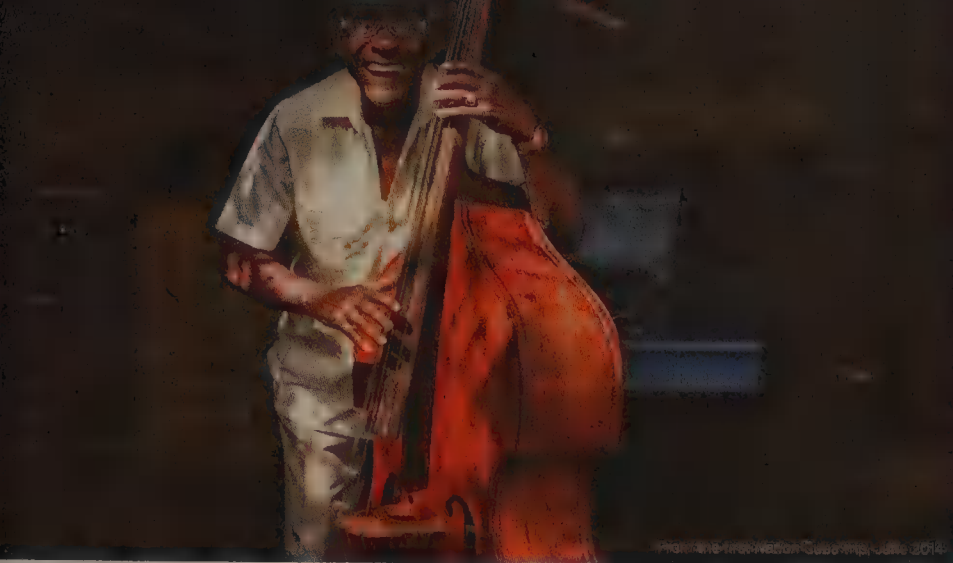
At the same time, the EU is widely perceived, for good reasons, as undemocratic. Its Brussels-based bureaucracies operate at several removes from the ordinary citizen, and their dictates, often perceived as arbitrary and unfair, have won them a reputation for unaccountability. The vice president of the European Commission revealingly remarked, after the recent Greek vote: "We don't change policies depending on elections." The European Parliament is weak, and its elections often

serve as little more than glorified national opinion polls. An attempt to provide Europe with a constitution failed in 2005—and the document in question was less a constitution, as Americans understand the term, than a confusing and unwieldy treaty, some 483 pages long. The members of the eurozone have effectively surrendered much of their sovereignty to a central bank over which they have little control—as Greece and Spain have learned, to their great cost. And once again, Britain remains in part aloof from the rest of the union, refusing to adopt the euro, and with a newly re-elected Conservative government promising a referendum on withdrawal.

The parallels between 1812 and 2015 are no coincidence. Napoleon perfected and bequeathed to much of Europe a distinctive style of administration. It is formally meritocratic, but in practice favors men and women groomed from birth to win admission to a small number of elite schools. It tends toward centralization and allows little real input from ordinary citizens. And it functions far less well in practice than in theory. Balzac memorably described the Napoleonic administration as "the nosiest, most meticulous, most scribbling, red-tape mongering, list-making, controlling, verifying, cautious, and finally just the most cleaning-lady of administrations—past, present or future." The statement applies equally to the EU, and sums up much of what British Euroskeptics find objectionable about the organization.

Andrew Roberts is a prominent English Conservative historian, journalist, and Euroskeptic. Several years ago, in an article for the *Financial Times* titled "Europe's Hubristic Imperial Overstretch," he compared the EU to Napoleon in its supposedly overweening ambitions. One might then reasonably expect his new biography of Napoleon to take a sharply critical view of the man. Instead, the book demonstrates one reason that Napoleon's legacy remains so difficult to grasp. Put simply, the sheer drama of Napoleon's life, and his extraordinary personal qualities, can shine so dazzlingly that all the surrounding context comes to look pale and insignificant in comparison. To writers dazzled in this manner, Napoleon properly belongs in the company of Alexander and Julius Caesar, not Brussels bureaucrats.

Roberts has been thoroughly dazzled. (Even the title of the British edition of his book, *Napoleon the Great*, understates his enthusiasms.) He quotes the French writer Chateaubriand with evident approval: Napoleon was "the mightiest breath that ever

animated human clay." He praises Napoleon's "protean energy, grand purpose, literary talent, near-perfect recall, superb timing, inspiring leadership." He marvels at the drive and genius that allowed an unknown member of the Corsican gentry to become arguably the greatest general in French history by age 28, the ruler of France by 30, and the greatest conqueror since the Caesars by 40. Roberts notes that Napoleon won 53 of the 60 major battles he fought—a record few military leaders in history have matched. A seasoned military historian, Roberts dwells lovingly on these battles and visited 53 of the battlefields himself while researching the book.

In the crowded field of Napoleon biographies, Roberts bases his claims to originality on these visits, and on his use of the new, definitive edition of Napoleon's correspondence that has appeared in France. The former certainly allows him to describe the battles with confidence and verve, but his interpretations of Napoleon's strategy and tactics do not actually differ much from earlier accounts. As for the correspondence, most of it was already easily available. We didn't need the new edition to recognize Napoleon as "one of the most unrelenting micromanagers in history"—although Roberts has gleaned the revealing detail that, soon after entering Moscow in 1812 and with a vast army and conquered territory to manage, the emperor sat down to dictate complex new regulations for the Comédie-Française. Roberts relies heavily on English-language sources and makes the occasional misstep in French history, as when he attributes a wife and daughter to the celibate Maximilien Robespierre, or suggests that the French Bourbon dynasty died out in 1836 (it didn't).

Roberts also follows Napoleon so closely, often day to day, that he neglects events that occurred far from the emperor's person but nonetheless helped to determine his fate. For instance, the prolonged resistance to French rule in Spain became an agonizing drain on Napoleon's resources and spurred some of the period's most brutal fighting. In 1808 and '09, French sieges of the Spanish city of Saragossa led to the most horrific urban combat seen in Europe before the 20th century. According to many historians, the so-called Spanish ulcer contributed as much to Napoleon's final defeat as the Russian catastrophe. But Napoleon himself spent very little time in Spain, so Roberts gives the war there very short shrift. He does only a little better with Napoleon's infamous 1802 decision to reestablish slavery in France's Caribbean colonies, reversing its abolition in the revolutionary period, and with his failed

attempt to reimpose full colonial control over what would become Haiti. In addition, he ends the book with Napoleon's death on St. Helena and says little about his legacy. Early on, he credits Napoleon with promoting "the ideas that underpin our modern world—meritocracy, equality before the law, property rights, religious toleration, modern secular education, sound finances and so on." But that cursory "and so on" speaks volumes, and Roberts never really returns to the theme. Overall, his approach recalls one of the French writer Germaine de Staël's remarks about Napoleon: "There is only one man in France…. One sees a fog that is called a nation, but one can't distinguish anything. He alone is front and center."

Readers interested in an exceptionally lively, up-to-date biography that highlights Napoleon's character and military career will still find themselves satisfied. Roberts describes with enviable clarity Napoleon's key military innovations, such as his use of a chief of staff, or his division of armies into intensively trained corps of 20,000 to 30,000 men who could maneuver independently of one another. (Both quickly became standard in Western militaries.) He makes the counterintuitive but entirely persuasive point that the army Napoleon led into Russia was too large. Had it been smaller, it might have tempted the Russians into a decisive battle, which Napoleon could well have won. Instead, the Russians stuck to their long-planned strategy of a scorched-earth retreat that ultimately doomed the invaders. Roberts also lauds Napoleon's extraordinary rapport with ordinary soldiers, and he has a vivid and affecting vignette of the emperor breaking into tears after the ghastly Battle of Eylau in 1807, when he could not avoid riding his horse over the half-frozen French corpses.

It is a pity that Roberts doesn't give an equally vivid sense of the enormous disruption that Napoleon caused across Europe. Here, however, Jenny Uglow's *In These Times* offers a useful corrective. Based on caches of letters from ordinary people across Britain, the book shows just how the effects of war sluiced into almost every cranny of British life between 1793 and 1815. The English Channel did not save the British from considerable sacrifice. One million of them—10 percent of the population in 1793—actually served in the army and navy. The total cost of the wars amounted to six times the prewar annual national income. (Uglow reports that accountants came up with the "eerily precise" figure of 1,657,854,518 pounds.)

Though her book runs to inordinate

length—a feature all too common in works on the Napoleonic period—Uglow has filled it with piquant details: for example, the French prisoner of war, kept captive on a fetid prison ship, who whittled a model guillotine out of bone and sold it to an English visitor. She amusingly recounts an abortive French landing in Wales in 1797, in which a handful of French troops mistook women in red cloaks for red-coated soldiers and immediately surrendered to them. But in general, there was nothing comic about these wars. Napoleon assembled a vast invasion army in 1803 and '04, and when naval failures made it impossible for him to cross the English Channel, he attempted to cut off the European trade upon which Britain depended for its economic survival. With his conquests on land seemingly unstoppable, Britain found itself in a desperate position. As William Wordsworth wrote in 1806: "Another year!—another deadly blow! / Another mighty Empire overthrown! / And we are left, or shall be left, alone; / The last that dare to struggle with the Foe." Ordinary Britons felt the same sense of peril. And, arguably, a distant echo of it still lingers across the British political landscape today—particularly with the bicentennial approaching of Britain's final victory over Napoleon at Waterloo—bolstering Euro-skepticism and the popularity of Nigel Farage's UK Independence Party.

Until last year, French writers had contributed surprisingly little to the torrent of Bonaparte bicentennial biographies. Before Roberts, the most notable entries came from the Australian Philip Dwyer (two volumes, starting in 2007) and the American Steven Englund (one volume, in 2004). Dwyer wrote particularly well about the way Napoleon shaped his own mythology. Englund's book featured brilliantly pyrotechnic prose and a keen appreciation of Napoleon's political instincts. Oxford's Michael Broers has written yet another study, the first volume of which will appear in the United States next fall, called *Soldier of Destiny*. (Clearly, Napoleon has dazzled him too.) In France, by contrast, until the new study by Patrice Gueniffey, the last serious Napoleon biography appeared nearly 40 years ago.

Historical biography as a genre has not fared well in France for even longer than that. The "Annales" school, which dominated the study of history in the country for much of the 20th century, had a preference for quantitative analysis and social-scientific models, and disdained the study of single

lives as "insufficiently" rigorous and overly literary. Annales has since lost much of its luster, but the suspicion of biography has endured. Even François Furet, the great liberal scholar of the French Revolution who passionately advocated a "philosophical" approach to history centered on great political thinkers and actors, never wrote a biography. At his premature death in 1997, however, he was researching one—about Bonaparte.

Gueniffey was Furet's student and is his successor at the elite École des Hautes Études. In 2007, he gave a lecture in Paris speculating on how Furet might have written the biography of Napoleon, had he lived. Six years later, he published, in French, a volume that followed his speculation so closely that it amounts, at least in part, to a work of filial homage. *Bonaparte*, which has now appeared in English translation, takes the life up to 1802—the moment when its subject, already the absolute ruler of France, formally took the title of consul for life and effectively became a monarch. (The actual imperial crown followed two years later.) A second volume, to be called *Napoleon*, is still being written.

While the English-speaking biographers have often been dazzled by Napoleon, Gueniffey, the Frenchman, has not. He expresses cool admiration, but never lapses into breathless adulation. He is a writer of real talent, who can set the scene exquisitely, as in this description (beautifully translated by Steven Rendall) of an Egyptian landscape through which Napoleon marched in 1798: "On this mineral, petrified 'ocean of solid ground,' on this dead land, the horizon was indeterminate, vague, floating, drowned in hot vapor or in clouds of dust raised by the wind." But Gueniffey's style in general tends toward imperious detachment, while pursuing lines of argument so subtle and complex that readers can easily lose their threads.

This is not the only reason English-speaking readers in particular may find *Bonaparte* frustrating. Gueniffey takes for granted a deep knowledge of the French Revolution, of early 19th-century literature, and indeed of the principal events of Napoleon's life. Parts of the book read less like a biography than a set of dialogues about Napoleon with a series of long-dead French writers, including Chateaubriand, Tocqueville, Taine, Sainte-Beuve, and Jacques Bainville, a founder of the deeply reactionary, anti-Semitic Action Française. Gueniffey's mentor Furet believed that historical scholarship advances less through the accumulation of new information, or through the application of new theories to masses of

data, than through studious reconceptualization that draws heavily on the insights of classic older writers. Gueniffey has made the method his own. Despite his book's enormous size—its 1,000 pages just barely cover the first half of Napoleon's career—he has consulted virtually no original manuscript sources. Instead, he weighs his venerable interlocutors against one another, corrects them with a certain degree of condescension ("Tocqueville's analysis is not wrong in every respect"), and quotes them at luxurious length.

Those readers who persevere will find that Gueniffey has nonetheless written an important book. He has read imposing masses of material and absorbed the best recent scholarship (even if he gives it far less acknowledgment than his older interlocutors). The book is exhaustive, scrupulously accurate, and firmly persuasive, for the most part, on the individual stages of Napoleon's career. It is likely to stand as the definitive biography for quite some time. Yet Gueniffey's choice of what to emphasize, and his deeply conservative overall interpretation, ultimately lead him, like Roberts, to fall short in illuminating Napoleon's legacy for the present.

Unlike Roberts, Gueniffey has relatively little interest in Napoleon's character and private life. He does engage in some brief psychological speculation about the young Napoleon's conflicted feelings toward his father, Carlo, whom he scorned for abandoning the cause of Corsican independence (before he abandoned it himself during the French Revolution). But Gueniffey quickly moves on with a dismissive remark: "Of course, none of all this explains his extraordinary history." In fact, Gueniffey treats Napoleon's Corsican origins with a Parisian contempt that will earn him no friends on the island. He chides the Bonaparte family for its "boundless greed" and speaks without irony of Corsica's "half-savage state" in the 18th century. Gueniffey has more sympathy for Napoleon's aristocratic wife, Joséphine, and devotes sensitive pages to the pair's turbulent marriage.

But Gueniffey's real passion, like Furet's before him, is politics. He wants to understand how abstract political principles could be given concrete and durable form in institutions of the sort Napoleon created. He wants to grasp how the relationship between the French state and French society changed over time. And he wants to know why one of the Western world's grandest experiments in utopian democracy, the French Revolution, gave way so quickly to Napoleon's authoritarian rule.

Gueniffey addresses these questions, as best I can tell (the argument is often tortuous),
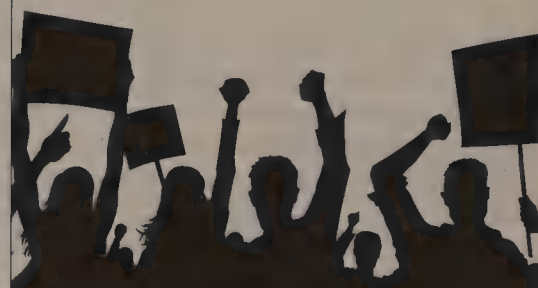
by casting Napoleon as the solution to the fundamental quandaries posed by the revolution. In his telling, the revolutionaries of 1789 "invested political action with an unlimited power to transform things." They sought to transform all of French society, substituting equality for hierarchy, liberty for despotism, and meritocracy for aristocratic privilege. But they sought to do so "from below," grounding political action in the will of the people, without imposing a direction or principle of authority. The result was a descent into political anarchy, the wild bloodshed of the 1793–94 Reign of Terror, and then, after 1795, the unstable, quasi-democratic regime known as the Directory. By 1799, Gueniffey writes, "passion had changed to a disgust that spared nothing and was manifested in a massive disengagement, a turn toward the private sphere, an almost absolute indifference to everything that concerned the state, ideas, or party struggles." In this moment of maximum disillusion, the French looked toward Napoleon, the hero who had won brilliant victories in Italy and then, in 1798–99, conquered Egypt (although his colony there quickly collapsed). In the fall of 1799, the general returned home and took power with ease, shunting aside the moribund Directory in a messy but rapid, bloodless coup d'état. He then carried out an authoritarian reform process from above. The French, who "had already forgotten the Revolution," accepted with gratitude the peace and order Napoleon offered, and found in his new regime "the political form they had been seeking in vain for more than ten years: this marriage of authority and liberty, of power vested in a single man and in popular sovereignty."

Despite the prodigious learning that has gone into *Bonaparte*, these are unconvincing claims, which echo all too closely the justifications Napoleon himself gave for his actions. They disregard considerable recent research showing that the Directory, for all its instability and chaos, maintained a vibrant and creative political life until the end. The regime made important advances in educational and social-welfare policy, and imaginatively sought to reconcile republicanism with the realities of modern commercial society. Gueniffey also treats Napoleon's violent seizure of power, on 18 and 19 Brumaire by the French revolutionary calendar (November 9 and 10, 1799), as tantamount to what he called, in his 2007 lecture and only half in jest, "a slightly rushed election." True, the new Constitution that Napoleon introduced a few months after Brumaire won approval in a plebiscite, as did

the 1802 revision to that Constitution that made him consul for life. (He won genuine majorities, even if his officials then cheated to make the results look almost unanimous.) But plebiscites held by an autocratic ruler—whose soldiers had literally dispersed elected representatives at bayonet point, who arrested political opponents and introduced harsh press censorship—hardly count as free elections. Napoleon himself once remarked, revealingly: "Controlled by the government, a free press may become a strong ally." This was less the "marriage of authority and liberty" than the burial of one by the other.

If the French still admire Bonaparte today, it is above all for the enduring legal and administrative reforms he accomplished during the initial years of his rule. His streamlined law code did indeed enshrine the principle of civic equality. His Concordat with the Catholic Church restored religious peace after years of revolutionary tumult, while guaranteeing possession of seized church lands to their new owners. Napoleon introduced a degree of administrative centralization, and he perfected the system of elite training schools and corps for high civil servants. The effects of these reforms are still apparent today, not only in France but throughout the European Union and its institutions. The challenge for the EU is how to reconcile institutions originally designed for autocratic government with democratic practices and aspirations.

This is not a challenge that ever concerned Napoleon Bonaparte. Gueniffey quotes him, damningly, from even before the coup of 18 Brumaire: "A Republic of thirty million men!… With our manners, our vices! How is it possible? That is a fancy of which the French are at present full, but it will pass away like all the others. What they want is Glory and gratified Vanity; but as for Liberty, they do not understand what it means." Once in power, despite the plebiscites, he based his legitimacy on his military victories more than on popular consent, admitting that "my power depends on my glory… conquest alone can maintain me." And so he condemned his country, already exhausted by seven years of brutal warfare when he took power, to another decade and a half of the same. It cost millions of Europeans their lives and left France broken and defeated.

But could things have turned out otherwise? Were the institutions and administrative style perfected by Napoleon ultimately compatible with the practices of representative democracy? The European Union is, of course, not a dictatorial regime like Napoleon's empire (whatever Andrew Roberts used to think). But its inheritance from Napoleon is by no means negligible, and it remains severely challenged by the problem of how to forge European unity while allowing for significant participation by ordinary citizens, including especially those from outside the social elites. Perhaps Gueniffey will do more to explore these continuities and challenges in the second volume of his biography. But for the moment, he has done less than he might have done to elucidate the legacy of his endlessly fascinating subject. ∎

Land of the Lost

by CATHY GERE

The conceit of Beth Shapiro's disturbing and thoughtful new book, *How to Clone a Mammoth*, is that it is a how-to manual, a cookbook for wannabe lords of (re-)creation. Nine of its 11 chapters describe steps in the process of bringing an animal back from extinction, beginning with how to select an organism to resurrect, and ending with how to look after it once it has been released into the wild. Along the way, the reader is treated to a sometimes dry exposition of the basic principles of the latest recombinant-DNA technology. Somewhere between wild, witty, speculative pop science and tediously technical genetics primer, the

Cathy Gere is a professor of the history of science at the University of California, San Diego.

How to Clone a Mammoth
The Science of De-Extinction.
By Beth Shapiro.
Princeton. 220 pp. $24.95.

book is a bit of an uneven read but well worth the effort, because Shapiro knows whereof she speaks. At the "ancient DNA laboratory" at the University of California, Santa Cruz, she and her colleagues study, among other things, the genetics of the mammoth, a cold-adapted relative of the elephant absent from this planet for 37 centuries.

A few years ago, Shapiro was contacted by the maverick environmentalist Stewart Brand, who recruited her to a network of scientists engaged in developing the basic techniques for de-extinction. In 1968, in the

first issue of the *Whole Earth Catalog*, his instruction manual for geeky DIY liberationists, Brand announced: "We are as gods and might as well get good at it." His mantra today, nearly half a century later, is that we must get good at exercising our Olympian powers as we hurtle ever closer to ecological catastrophe. For Brand, de-extinction—along with nuclear energy and geo-engineering (deliberately introducing reflective particles into the atmosphere to mitigate the greenhouse effect)—is one of the more promising technologies to help humans ride out global warming. Every month, the members of his organization Revive & Restore share news via teleconfer-

Each step of this process is at least theoretically achievable, given the current state of genetic research. The devil is in the details, and most of the book is devoted to a thoughtful rehearsal of the difficulties and complexities of the undertaking, as well as the reservations Shapiro has about its desirability. Describing herself as an "enthusiastic realist" concerning the project, she lists the daunting obstacles in the path of de-extinction, as well as some of the compelling reasons we might want to call a halt to the whole endeavor, while at the same time cheerfully insisting that it's a worthy enterprise, on balance, and will happen soon whether we like it or not. She comes

well, unecological. In fairness, Shapiro's students did propose one idea that would be beneficial to the ecosystem: reintroduce the Yangtze River dolphin in order to goad the Chinese government into cleaning up that watercourse. The chain of reasoning is so expensive, wasteful, backward, and perverse as to seem quite politically plausible.

Shapiro's vision of de-extinction is focused entirely on the larger ecological benefits to be reaped from the exercise. For her, the goal is not to satisfy scientific curiosity or stimulate tourism, but to reintroduce keystone species in order to initiate a cascade of effects congenial to restoring prehuman levels of biodiver-

A mammoth tusk exposed by placer mining near Dawson City, Yukon Territory, Canada.

ence about their progress toward the goal of resurrecting mammoths, dodos, passenger pigeons, and other extinct creatures. Partly as a result of Brand's missionary zeal, most of the people Shapiro hangs out with "believe that de-extinction is inevitable." "I'm nearly certain," she says, "that someone will claim to have achieved de-extinction within the next several years."

How might an aspiring deity go about the astonishing business of reversing the extinction of the mammoth? First, Shapiro instructs us, find a well-preserved mammoth bone from which the whole genome can be sequenced. Then identify the differences between it and the genome of its nearest living relative, in this case the Asian elephant. Tinker with the elephant genome to make the animal hairy, fatty, metabolically cold-tolerant, and in possession of enormous curly tusks. Engineer a cell containing the altered DNA. Turn the cell into an embryo. Implant the embryo into the womb of a female Asian elephant. Wait for a baby mammoth to be born.

across as disarmingly modest and refreshingly cautious, and it's a relief to learn that the de-extinction project is in such sensible hands.

At Santa Cruz, Shapiro teaches ecology, and one year she set her graduate students the task of choosing an extinct species to reanimate. She was taken aback by the students' reasons for their choices. Almost every student selected a species that humans had wiped out, tempting Shapiro to make a diagnosis of liberal guilt. With one exception, the students all chose large and charismatic organisms, perhaps indicating that a shallow aesthetic bent drove their choices. As for the students' stated motivations, they ranged from "this species is scientifically interesting," to "this one will be good for tourism," to "this one will be relatively easy to engineer."

It's a little discouraging to learn that Santa Cruz graduate students in ecology, whom one fondly used to imagine as dreadlock-adorned tree-dwellers, should be so,

sity. One controversial proposal for environmental regeneration involves the reintroduction of large herbivores into the wild: Their big feet trample and turn over the soil, their excrement transports seeds and fertilizes the ground, and their selective grazing of woody plants opens up space for more diverse flora. Some advocates for this "rewilding" argue for the release of exotic megafauna, such as Asian and African elephants, from American zoos, that they might inhabit the empty ecological niches of long-extinct species. Shapiro persuasively integrates de-extinction into the rewilding project, arguing that it makes more sense to genetically reengineer hairy mammoths to do the job than to hope against reason that tropical elephants will learn to enjoy winter snow.

Stewart Brand's current favorite candidate for resurrection is the passenger pigeon. The attraction for him seems to be its status as an icon of human destructiveness. Enormous flocks of passenger pigeons once darkened the North American skies. One such flock,

witnessed by the ornithologist John Audubon, took three days to pass overhead. It was said that a single bullet fired directly upward could fell 50 or more birds. The passenger pigeon was hunted for cheap meat and pillow feathers, and its population declined catastrophically at the turn of the 20th century. The last one, a female named Martha, expired in the Cincinnati Zoo on September 1, 1914.

The story of the passenger pigeon is undeniably dramatic. There once had been so many of them—and then, because of human greed, there was only one. In our remorse, we gave the last passenger pigeon a name, and recorded the exact date of her passing. Despite the poignancy of Martha's demise, one gets the impression that Shapiro does not share Brand's enthusiasm for the species: "Flocking in the billions, hungry passenger pigeons could destroy the entire seed crop of a forest stand in very little time," she observes. "When they nested, as many as five hundred birds would nest in a single tree, and when they left the nests, they tended to leave behind dead trees covered in bird droppings." Yuck. It's one thing to mourn the passing of the last passenger pigeon. It turns out to be quite another to contemplate a vast flock of de-extinct birds sweeping through the suburbs and farmlands of 21st-century America, leaving in its wake a trail of tree skeletons dripping with shit.

Desirability aside, many of the practical difficulties attendant upon de-extinction may be summed up with a single word: epigenetics. Formally speaking, "epigenetics" refers to everything outside of the gene itself that might affect its expression, from chemicals attached to DNA that turn genes on and off, to the ecosystems in which whole organisms live and reproduce. It takes more than the correct DNA sequence to make a functioning animal. An egg cell, for example, doesn't just provide a nice warm place for an embryo to grow; it is a complex system of stimulants and suppressants that initiates the orderly development of the organism. A mismatch between egg and DNA disrupts the process, and so the more closely related the surrogate species is to the "target" species, the more likely the chances of success. The line of descent leading to Asian elephants and mammoths diverged some 7 million to 8 million years ago, at about the same time the human line split off from the other great apes. Using an elephant womb to grow a mammoth baby, in other words, would be a bit like a woman gestating a chimp.

Shapiro makes the alien-womb problem particularly vivid with the example of the Steller's sea cow, a large marine mammal that was hunted to extinction by hungry sailors in the 18th century. The nearest relative of the Steller's sea cow is a dugong. This would make the dugong uterus the obvious candidate for resurrecting the Steller's sea cow, if not for one impediment: "a newborn calf will be somewhere in the range of three to six meters long. Longer, at birth, than his surrogate mom." The image of a de-extinct fetus bursting the boundaries of its surrogate parent may be an apt symbol of the combined folly, grandeur, and difficulty of the whole enterprise.

The epigenetic problems with de-extinction would not end with the birth of a healthy infant. Baby Asian elephants dine off the feces of their mothers in order to ingest the microbes needed to break down the woody plants on which they will feed for the rest of their lives. Mammoths did the same thing. "Will it be necessary to reconstruct mammoth gut microbes?" Shapiro asks. Having created a healthy mammoth baby and fed it de-extinct dung, scientists will then have to repeat the trick again and again, using subtly different DNA sequences, in order to generate the genetic diversity needed for a sustainable living population. Finally, once they have a herd of not-completely-identical baby mammoths able to digest the toughest shrubbery, they will then have to teach the poor little beasts their natural behaviors—without anyone really having a clue what those might be.

To illustrate this problem, Shapiro recounts the story of the California condor, the population of which had dwindled to a mere 22 birds in the early 1980s. An intensive program of captive hatching was initiated. The incubated condor chicks had to be raised by humans. How were the humans going to teach the birds to be birds? The answer the surrogate parents came up with was both heroic and absurd: They made puppets resembling the heads of California condors. After watching videos of condor parents interacting with their young, they then used the puppets to implement "an appropriately strict, condor-like parenting style."

This *Sesame Street* approach to interspecies pedagogy enjoyed only limited success, and the human-raised condors apparently turned into the avian equivalent of sullen teenagers: "Rather than shy away from humans, they preferred to play with garbage, hang about on roofs chewing on loose tiles, and stare disdainfully at rock climbers from above," Shapiro dryly remarks. California condors now number in the hundreds, but the populations still require a lot of management, including twice-yearly veterinary visits to clean their blood of contaminants in the food chain.

It is greatly to Shapiro's credit that she catalogs so many of the drawbacks and obstacles to the dream of de-extinction. After she gave a TEDx Talk about de-extinction in 2013, she got both hate mail and fan mail, and now she handles the standard objections with a veteran's touch. The "moral hazard" argument—once de-extinction is a possibility, we will cease to worry about wiping things out—is an overly pessimistic view of human nature, she argues. She does admit that de-extinction might cause animal suffering, but also points to our growing understanding of the needs of animals in captivity as a solution. To the argument that resurrected species have nowhere to go, she responds with the hope that de-extinction "may act as a beacon for new investment and new solutions, which would equally benefit existing conservation projects." The "playing God" objection is simply boring old hat, and she points out that we have been manipulating nature from the time of the domestication of the gray wolf some 30,000 years ago. She cheerfully concedes that "the product of de-extinction won't be the same thing as the original species," but she doesn't see this as an impediment, given that ecological restoration is the aim of the whole enterprise: "We don't need to create exact replicas of extinct species to achieve this goal," she says. "Instead we can engineer species that are alive today so that they can act as proxies for extinct species."

It is clear from the lucid honesty of this book, however, that de-extinction would involve an astounding amount of waste and expense. "We'll need hundreds, even thousands of elephant eggs for this to work," Shapiro says. "Elephants are struggling to make enough elephants to sustain healthy populations; the last thing they need is for us to be snooping around their ovaries stealing their precious few mature eggs." For Shapiro, this would be a deal-breaker, if it were not for the fact that "there may be another way" (an oft-repeated sentiment in the book). In 1998, scientists managed to get a genetically engineered mouse to produce "a slightly misshapen elephant egg." So, if we can get tons of mice to produce tons of elephant eggs, we might be able to turn at least a few cells containing genetically reengineered mammoth DNA into viable embryos, which we will then try to implant in elephant wombs.

Even with an endless supply of elephant eggs, the chances of success are acutely slim. The only attempted de-extinction on record was of a bucardo, a species of mountain goat that went extinct in 2000. Cells from the ear

of Celia, the last bucardo, were defrosted and transferred into 782 eggs of domestic goats. Of those, 407 developed into embryos, of which 208 were transferred into surrogate hosts. Seven pregnancies were established. Only one lasted to term. The resulting baby bucardo lived for less than 10 minutes. To anyone unfamiliar with the submerged iceberg of heroic failures and mind-numbing repetitions on which the tip of scientific achievement rests, these odds seem laughable. But biology has overcome these odds before, and doubtless will again.

Shapiro makes a good, sensible, balanced case, but her book could leave readers with an uneasy feeling. Some sufferers from ecological anxiety, including myself, cannot relinquish the forlornly Luddite conviction that the challenge to ameliorating the effects of climate change is to reduce human impacts by doing *less*. Mammoth de-extinction is a rather fantastical and extreme example of the opposite impulse. But maybe Brand and his fellow enthusiasts are right: We need to undo the damage that we've already done—and so far, we seem absolutely incapable of going back even to the 1990s, let alone to lives remotely resembling preindustrial levels of consumption and pollution. Given the insatiability of human curiosity and appetite, perhaps the only way back is to go forward, full bore, into the science-fiction future. ∎

Renata Adler, April 1975, Patmos, Greece.

© THE RICHARD AVEDON FOUNDATION

Patient Effort

by KATIE RYDER

I n 1970, Joan Didion wrote of the "ambiguity of belonging to a generation distrustful of political highs, the historical irrelevancy of growing up convinced that the heart of darkness lay not in some error of social organization but in man's own blood." Renata Adler, born in 1938, just four years after Didion, shared in part this conception of generational identity.

Katie Ryder is a writer and editor living in New York.

After the Tall Timber
Collected Nonfiction.
By Renata Adler.
New York Review Books. 515 pp. $29.95.

In the introduction to her 1969 collection *Toward a Radical Middle*, Adler identified the cause that Didion left more oblique: the experience of World War II and memories of its revelations. She wrote, "Ours was the first age group to experience the end of the Just War as a romantic possibility." As a result, her generation, she believed, was wary of ideological rhetoric, of the "particular totalitarian lie at the heart of political cliché." We, she said, "still distinguish among literalisms, metaphors, questions of degree." And "the simplicities of 'imperialism,' 'genocide,' 'materialism,' 'police brutality,' 'military-industrial complex,' 'racism,' tossed about as though they were interchangeable, and as though they applied equally to anything with which one is out of temper, are not for us. Neither are the simplicities of anti-Communism, free world, 'violence,' and 'radicalism' itself."

Didion thought that her cadre had been "robbed" early on "of a certain capacity for surprise," and suggested they were cheated of more. "If I could believe," she wrote, "that going to a barricade would affect man's fate in the slightest I would go to that barricade, and quite often I wish that I could, but it would be less than honest to say that I expect to happen upon such a happy ending." The result of the same dark era, the same acquired mistrust, was for Adler slightly different: "From now," she wrote, "it is all patient effort, unsimple victories."

We find in her new collection, *After the Tall Timber*, a selection of nonfiction work from 1965 to 2003, that Adler did indeed go to the barricades, though as a decided non-participant in party politics—like Didion, and unlike so many writers of their era. But where Didion says that she and her peers resigned themselves to the world of the "personal," to "a separate peace," in the face of their existential dead end—where she would find an unavoidable, unfortunate truth—Adler finds instead a dilemma. Her way forward, though not her way out, seems to be this: At least we might, and at first we must, tell the truth.

Michael Wolff, in his preface to *After the Tall Timber*, writes that Adler's "politics, to the extent that she has any prescribed position, has to do with language." I would say it slightly differently. While rejecting political ideology, Adler holds to an ethics of language. She opposes misinformation in its many forms: exaggeration—the "apocalyptic sensibility," the "gesture and rhetoric of revolution"; oversimplification; nonsense in the dress of substance; the co-option, or, in today's parlance, "appropriation," of terms more meaningful in other realms; all manner of imprecision, euphemism, and cliché. Her career-long fight, her barricade, is for faithful representation and fidelity to the real meanings of words, and thus against obfuscation and the "debasement of language." This was her

"patient effort"—or, more accurately, her persistent effort, of variable patience—sustained as she followed civil-rights marchers to Selma and Mississippi; reported from wars in Biafra and Israel; and worked to "decode" the Nixon scandal, the Starr Report, and "the most lawless decision in the history of the Court," *Bush v. Gore*.

In these instances and others, Adler works to hew to the facts of what was said and done, and holds others to their words—indeed to the letter, and sometimes to the letter of the law. Exposing the misuse of language in dissembling service to ideologies—whether of movements, personalities, or institutions—becomes her cause; and relatively innocent opacity or "muddle," employed incidentally,

Adler is never obsequious, rarely deferential. Hers is a voice of pure authority.

doesn't escape her scrutiny. She hears echoes of authoritarian systems past in unexpected places. On the "Northern liberal" response to the "overtones" of "Black Power," she writes: "A mob chanting anything, and particularly a spondee followed by an unaccented syllable, seemed distressingly reminiscent of prewar German rhetoric." She is steadily wary, not of "right" and "wrong," but of totality.

From this position, Adler makes her complaint. And her nonfiction, as collected here, is that, to be sure. She implores never, and her tone implies that we—the reader, the society—may take or leave the case she has built. As in the work of Didion and many male writers whose tones are seldom discussed in such terms, Adler is never obsequious, rarely deferential. In her career, in which she has penned multiple condemnations of colleagues and powerful publications, including former employers, this may not have been advantageous. (Though Adler had other ambitions, and her first novel, *Speedboat*, received the Ernest Hemingway Award for the best fiction debut of 1976 and earned her a position in the annals of lauded experimental realism.) Regardless, it has served her nonfiction very well: Hers is a voice of pure authority.

This authority is, in part, a legacy. Her title, *After the Tall Timber*, recalls Mary McCarthy's eulogy for the New York Intellectuals, of whom Adler is a direct descendant. The book covers events and phenomena with notable current relevance: civil rights and Black Power; the corrupt and incompetent regulation of domestic armed forces; war in the Middle East; the politicization of the courts; and failures of the press, including the tendency to elevate "meta-journalistic" concerns over the news, and inconsequent failures of reporting over those deeply consequent. This is all perhaps only an indication that the struggles of the 20th century unfortunately abide.

In all cases, Adler tests the coherence of the ideological systems and positions around her, and they most often fail. Her findings can fall in unloosed exasperation— the "no longer New Left" was "contributing as much to serious national concern with the problems of war, racism, and poverty as a mean drunk to the workings of a fire brigade"—or quieter, simmering scorn. At a gathering of the National Guard, whom she has convicted of killing many innocent civilians, she asks "whether so many hansoms were normal even for a convention of tourists at the Americana"; a cabdriver responds that "they were not." Her complaint can come, too, in calm, bricklaying finality—perhaps most famously on a collection of Pauline Kael's late-career film criticism: "to my surprise, and without…exaggeration, not simply, jarringly, piece by piece, line by line, and without interruption, worthless."

Her own work seeks the specific. Rather than pretend there is such a thing as the "hippie left," she lays out "the constellation that is longhair, bohemia, the New Left, individualism, sexual freedom, the East, drugs, the arts." Writing on the James Meredith March Against Fear—a Black Power march in Mississippi in 1966—she devotes eight pages to "the cast" of the civil-rights march "institution." She reports as well on the slight, fluid boundaries of types—of people, events, incidents—and the tensions pulling across those faint, flimsy, or brittle lines.

Complex phenomena become succinct: Stokely Carmichael, finding that he is continually misrepresented in the press, doubles down in obstinacy and begins "to make himself eminently misrepresentable"; Pauline Kael is guilty of the "hack carom," "taking, that is, something from *within* the film and…turning it *against* the film." Adler's well-chosen details are in the classic mode of the 1960s *New Yorker*, from which many of these pieces are culled: "the marchers lined up for supper (three tons of spaghetti), which was served to them on paper plates, from brand-new garbage pails." Also typical of that style is the specificity of her vocabulary—not a "dance," but a "frug." Her metaphors are evocative—"The decision… is a swamp"—and her descriptions chosen for associative import. On the march to Selma: "the skeletons of old kites were just visible in the dim lights from the windows of St. Jude's Hospital."

Adler favors understatement—hypocrisy is "interesting," illogic "curious"—and often finds opportunity for deep sarcasm that overlaps entirely with straightforward fact: "By Wednesday noon, Resolutions had abolished the capitalist system."

Rhetorics are translated: "Being 'radicalized'" meant "voting against one's principles with an expression of Machiavellian deviousness, or discussing one's politics as a most interesting turn in one's personal psychology." The word "'revolution'…was used for every nuance of dissent." And continually, she works to define "what really is at stake" in muddied conversations. What has gone unspoken is of utmost importance; she seeks "the underlying fact," "the underlying logic," "the underlying proposition," and often believes she's found it. She is concerned with the "jettisoning" of "meaning from vocabulary"; and when she discredits Pauline Kael in roughly 25 pages of dedicated demolition, finding that the work is empty—"the whole verbal apparatus promotes, and relies upon, an incapacity to read"—the implication is that dogmatic, reflexive vacuity matters, no matter its realm.

That her concern with language is not a "delusion of punctilio"—a diagnosis she levels at *The New York Times* as the least of that paper's problems—is a case more directly made by her condemnation of the *Times*'s evasion of responsibility in the plight of Dr. Wen Ho Lee, whose imprisonment (after being accused of sharing US nuclear secrets with China) was aided by the paper's likely erroneous findings of treasonous deeds. Adler's fight against the *Times* eventually became its own cause, and leads to true breakdowns in measured argument—the only such breakdowns I found in *After the Tall Timber*. She writes, for example: "There is no longer even a vestige or pretense, on the part of the print journalist, of any professional commitment to uninflected coverage of the news." But of course there is a "vestige," of course there is a "pretense." In this way, her failure actually validates her prior commitment to no cause; but the most powerful arguments for her dedication to language, and to reason,

may come when this fidelity leads directly to the high ground:

> What the movement seeks now is not benevolence but a recognition of reality: the black man's rights are *law*—and for the white community to resist or ignore the law implies the collapse of an entire legal and moral system. It has become intolerable to the black man to win so slowly what is his by right, and it has become too costly, in every possible sense, to go on denying him his just place in this society.

The politics of language have stalked the electronic and literary air as of late. In January, Jonathan Chait, in a much-discussed article for *New York* magazine, aimed to debunk an ascendant second wave of left-born political correctness—one that, in the age of the Internet, would have far wider reach than the university-derived PC-ism of the 1990s, and thus would be more stifling and, in instances of real censorship, more dangerous for society at large. Those implicated as "police" by Chait's argument, you might have guessed, did not agree.

Implicit here, it does not seem to have been said, are questions of the barricades: who is to go to them, and where they properly lie. These are questions of political versus rhetorical versus literary commitment, and though these co-exclusions are fraudulent, such terms may be of use. Some writers are activists first, and certainly these are of a different creed. Agreement as to whether the barricades of politically committed writers are well chosen, and their arguments sound, varies widely; whether Jonathan Chait's work is logical, whether it can withstand the measure of Writer, simply, remains to be argued elsewhere.

There is a related current complaint, widespread and well-founded, that the non-fiction essay today is too predictable, too partisan. Michael Wolff, in the preface to *After the Tall Timber*, writes: "What is to be made of the usefulness or intellectual integrity of journalists and commentators whose positions are always known? They might as well never write at all—saving time for everyone." This seems to be, more obviously, a concern of the barricades—too firmly fixed, and players too firmly fastened to each side—but it is not that entirely.

In the foreword to the newest edition of the annual *Best American Essays*, series founder Robert Atwan writes: "I've come to think that one reason for the oppressive predictability of polemical essays can be found in today's polarized social and political climate. To paraphrase Emerson: 'If I know your party, I anticipate your argument.' Not merely about politics but about everything."

He goes on: "Most of us open magazines, newspapers, and websites knowing precisely what to expect. Many readers apparently enjoy being members of the choir." Wolff writes, similarly, of predictable opinions: "And yet, of course, the market accommodates them, whereas unanticipated views are met with hostility and confusion"—implying that the market is free, and pinning at least some blame on the common reader. But the market does much more than "accommodate." The content of today's popular journalism is not the result of a country of people whose minds blink in yeses and nos, but at least in great part a result of systems blinking in zeros and ones. That is: the demands and rewards of the Internet, which we strangely, frequently put aside in such conversations, as if pretending they weren't there, might let it be true.

Atwan calls the current environment "rancorously partisan," and I am inclined to agree, if we allow "partisan" to mean something greater, a meta-step removed from its standard definition: a perpetual interest in, and dedication to, the breaking of ideas into parts and sides—a way of thinking that implies that there is always a dividing wall, and we may always stand along it.

Opinion writing with the broadest reach—that is, the most trafficked—comes to us from a strange world of either/or, and its most damaging, most stifling effect is not the imposition of specific thought—of anti-liberal PC-ism, or privileged liberalism, or right-wing invective. It is neither, in my view, the deadening familiarity of the established stance. It is instead the ever-present normative push, not to specific thought but to organizing ideas into ready and waiting positions. Consider two very familiar formulas for the titles of online articles. The first, "What We Talk About When We Talk About X," is a mutated open-ended question, formerly indicating an exploration of meaning ("What We Talk About When We Talk About Love" is a short story, and collection, by Raymond Carver; "What I Talk About When I Talk About Running," a memoir by Haruki Murakami). It is used now most often to correct an interpretation of meaning. "What X Got Wrong About Y" is more straightforward in its purpose, but both structures, used ad nauseam, include unreasonable premises of totality and simplicity.

Today's online commerce of words necessitates repetition—hence the fetishization of keywords, which become, in practical terms for editors and magazines, the correct labels for ideas, for observations, for all parts of thought. Cliché is quite literally the currency. We kid ourselves every time we discuss the devolution of public language as if it exists separately from this commoditization. Profitable words—those that embed a piece in a widespread "discussion," the same words any writer would use to "join the conversation"—are used to mean more and more, and, as they are wont to do, in their distinction begin to mean less.

Whether it follows from the market or no, there also seems to be a genuine fetish for correctly breaking thought into parts. Of the flood of think pieces following the attack at *Charlie Hebdo*, scores were written to rectify expressions of sympathy and solidarity: "Free speech," "respect," and "identity" had been categorized incorrectly. This is an environment in which no nuance is taken for granted—enough so to fuel a cottage industry for explaining that human experience, or international injustice, is "complicated":

> WHY ARE WE CRYING? THE COMPLICATED TRUTH ABOUT THE TEARS THAT WE SHED

> THE COMPLICATED TRUTH BEHIND DOMESTIC VIOLENCE

> THE COMPLICATED TRUTH BEHIND THE EMPIRE OF THE UNITED STATES OF AMERICA

> THE COMPLICATED TRUTH BEHIND ISLAMIC STATE'S HORRIFYING LIBYA VIDEO

And, for good measure:

> THE COMPLICATED TRUTH BEHIND ASPARTAME

Although the comparison is far from fair, it's all very funny and ludicrous, and seems barely real against the steady, triply qualified lines of a Renata Adler, nearly shameful alongside Didion's bounded lens of self-awareness. But where the barricades lie, and where one stands, if one is to go, are still questions of greatest significance. There is still, as there has always been, what an astute subject of Adler's called, in 1969, the "nuisance of having to reevaluate." It is accompanied now by new, particular obstacles, and we would do well to grant their existence. The rest will take, as it always has, some effort. ∎

Puzzle No. 3365

JOSHUA KOSMAN AND HENRI PICCIOTTO
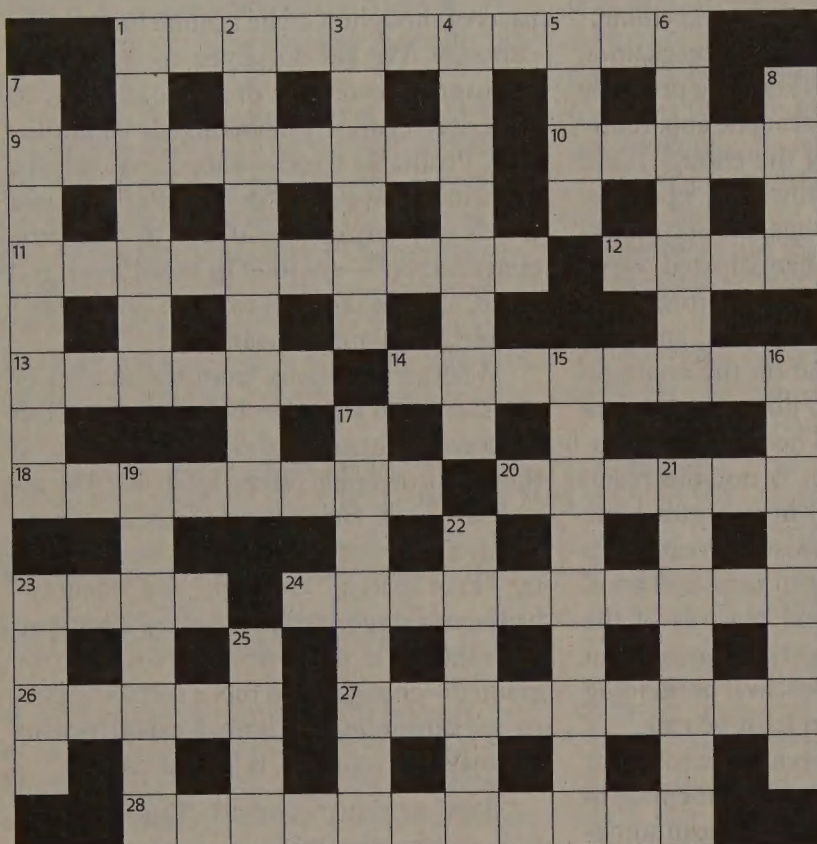
ACROSS

1 Spot vehicle on concrete moving forward (11)

9 I can't burst inflammation by making a scene (6,3)

10 Fish taco's number 1 with a bun (5)

11 Actor Treat smashed pottery (5-5)

12 Talk with hipster taking heroin (4)

13 Victorian critic to go downhill in race (6)

14 Superlatively weak charge consecrated (8)

18 Wild animals covered with fuzz and connective tissue (8)

20 Outside lair, I returned feeling tense (2,4)

23 Tuna salad for 22's mother (4)

24 Gum coating Howard Dean initially told a story (10)

26 Peg follows you around Monaco with private student (5)

27 Someone providing an answer cut short relaxation to think (9)

28 Regular face, defiant after an attack (11)

DOWN

1 One variable star, full of energy! (7)

2 Salvador's in Virginia and New Mexico, wreaking wanton destruction (9)

3 Right-winger's one absurd argument against… (6)

4 …things seen flying around South American monkey (8)

5 Cockney warms up food (4)

6 Motive, say, for a poet to cheer wildly (7)

7 Onetime test of the country (8)

8 Opening pose involves lake (4)

15 Obtain cod, evolving into marsupial (9)

16 Teddy's smell you once inhaled (8)

17 Part of a foot gets big after losing a pound on top (2,6)

19 Kelly overlooking a jerk from conception (7)

21 Laboring under a misapprehension when stripped of recreational drugs? (7)

22 Money enthralls American relative (6)

23 Singer taking leads in *Aida*, *La Traviata*, *Otello* (4)

25 Individual throwing up (meat, mostly) (4)

SOLUTION TO PUZZLE NO. 3364

ACROSS 1 AFTE(R) REF(L)ECTION (*office tent are* anag.) 9 BURN + I SHED 10 MO[L/r]A[R/l] 11 CO[L/r]ONE[L/r] 12 C[R/l]EATED 13 [R/l]EE[L/r]S 15 LAT[e] + VIA 19 V(TT)ALS (*Slav* rev.) 20 G[L/r]OVE 23 [R/l]EG[R/l]ESS 25 APPEA[L/r]S 27 F[R/l]OWN 28 anag. 29 anag.

DOWN 1 AL(BACOR)E (*cobra* anag.) 2 T(HR)ILLER 3 "rain" 4 EC(HOLA)LIA (*Alice* anag.) 5 hidden 6 COM(PET)ING 7 anag. 8 anag. 14 "sly din too" 16 anag. 17 anag. 18 letter bank 21 PRO-FIT 22 hidden 24 S-PEAK-[s] 26 PRO(N)G (*gorp* rev.)
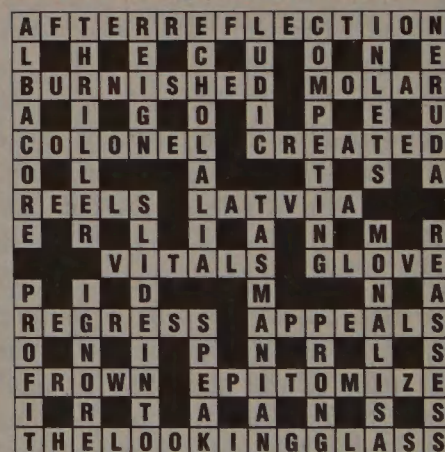
Kosman and Picciotto explain "How to Work *The Nation*'s Cryptic Puzzles" at thenation.com/puzzle-rules.

You deserve a factual look at . .

Mr. President, Stop the Iran Deal Now!

Iran is the world's leading exporter of Islamic terror and our greatest enemy. Your deal fails to keep Iran from acquiring nuclear weapons. It's time for a reset.

Iran's constitution commands it to conquer the world through Islamic jihad, and Iran increases its bloody Middle East conquests daily. Supreme Leader Ayatollah Khamenei regularly leads chants of "Death to America" and "Death to Israel." Can we afford an agreement that actually paves the way for a nuclear-armed Iran?

What are the facts?

Iran's terrorist aggression makes it the greatest threat to world peace—*and* America's greatest enemy. The Islamic Republic has sown seeds of global jihad for decades, killing thousands of Americans, Europeans, South Americans, Arabs and Israelis worldwide since 1982, including the deaths of 241 U.S. Marines and 58 French peacekeepers in the 1983 Beirut barracks bombings. Today, Iran sponsors terrorist proxies, such as Hezbollah, which controls Lebanon and militarily backs Iran's control of the Syrian government. Iran has also achieved dominance in Iraq by helping the Iraqis battle the Islamic State, and most recently it has seized control of Yemen through its Houthi agents. Suddenly Iran has graduated from being the largest state sponsor of Islamic terrorism to the major Islamist colonial power in the Middle East. Most distressingly, Iran proudly trumpets its intention to "annihilate" Israel, a goal it asserts is "non-negotiable."

Despite Iran's record of terror attacks against the U.S. and our allies worldwide, and its open hostility to American values and objectives, the White House now proposes a nuclear arms agreement with Iran that falls shockingly short of Mr. Obama's 2012 promise to "prevent them from acquiring a nuclear weapon."

Not only does the proposed "Iran Deal" *fail* to stop Iran from acquiring nuclear armaments, it permits Iran to *continue* developing nuclear weapons technology over the next ten years. Even more frightening, Iran denies agreeing to many key provisions that Secretary of State John Kerry claims are essential to it.

What's wrong with the "Iran Deal"? Iran has a long history of lying about its nuclear activities and cheating on agreements. Iran ratified the Nuclear Non-Proliferation Treaty in 1970, yet has been developing nuclear weapons—and lying about it—for decades. Iran also has ignored a U.N. Security Council demand that it suspend nuclear enrichment activities. In short, Iran is a bad actor on the world stage and can't be trusted. President Obama promised in 2012 that "The deal we'll accept is that they end their nuclear program," which is the deal most Americans

---

"The deal we'll accept is that they end their nuclear program."

President Barack Obama, October 22, 2012

---

want. Here's what that deal must look like:

1. End Iran's nuclear program. This means shutting down Iran's Fordow and Arak nuclear facilities and ceasing all centrifuge-enabled nuclear R&D. Iran refuses. Why?

2. Export Iran's nuclear stockpiles. Iran has no peaceful need of its extensive nuclear stockpiles and should ship them away. It refuses this. Why?

3. Abandon development of Intercontinental Ballistic Missiles. ICBMs have only one purpose—to deliver nuclear bombs long distances, as far as to the U.S. Yet Iran refuses even to admit development of such missiles. Why?

4. Permit "anytime, anywhere" inspections. Iran must agree that nuclear inspectors can visit any suspicious site without warning. Iran refuses to allow this. Why?

5. Slow easing of sanctions. Any softening of economic sanctions must be spread over years, only as benchmarks are met. Iran insists on instant sanctions relief.

6. Abandon terrorism and colonialism. Iran must cease its global terror campaigns and its sponsorship of violent colonial aggression.

7. Severe punishment for any violation. Any agreement must facilitate true instant "snapback" of economic sanctions in case Iran violates this agreement.

What's our alternative? President Obama and Secretary Kerry seem desperate to make the Iran Deal—a weak negotiating posture that has led to weak terms. If we are to make a good deal, we must insist on the conditions above and be ready to walk away. No deal is better than the current proposed deal, which does not fulfill Mr. Obama's promise to the American people. This deal, in allowing Iran to keep its nuclear infrastructure and continue nuclear weapons research, is sure to start a nuclear arms race in the Middle East, starting with Saudi Arabia, Egypt and Turkey. What's more, when Iran begins to cheat on this agreement—which is likely—it may force Israel to take unilateral military action, since a nuclear-weaponized Iran is an existential threat to the Jewish state. Those who criticize the proposed "Iran Deal" are often accused of wanting war with Iran. In fact, it is Iran's current nuclear weapons development that is provocative and bellicose.

If we want to avoid military action against Iran—which most Americans do—we must negotiate an agreement that truly prevents war. It's time to set aside the current deal—which Iran has not even agreed to—and start again. We must continue a harsh sanctions regime until Iran realizes we are serious about preventing their acquisition of nuclear weapons.

This message has been published and paid for by

FLAME

Facts and Logic About the Middle East
P.O. Box 590359 ■ San Francisco, CA 94159

Gerardo Joffe, President ■ James Sinkinson, Vice President

FLAME is a tax-exempt, non-profit educational 501 (c)(3) organization. Its purpose is the research and publication of the facts regarding developments in the Middle East and exposing false propaganda that might harm the interests of the United States and its allies in that area of the world. Your tax-deductible contributions are welcome. They enable us to pursue these goals and to publish these messages in national newspapers and magazines. We have virtually no overhead. Almost all of our revenue pays for our educational work, for these clarifying messages, and for related direct mail.

149

To receive free FLAME updates, visit our website: www.factsandlogic.org

MAKING PRINCIPLED INVESTMENT DECISIONS

Domini

SOCIAL INVESTMENTS®
Investing for Good℠

Domini's Global Investment Standards establish two long-term goals: universal human dignity and ecological sustainability. Each and every company we review is evaluated, within the context of its core business model, against these objectives. Certain industries, including tobacco manufacturers, military weapons manufacturers and firearms manufacturers, are "fundamentally misaligned" with these goals. In other words, their core business model is antithetical to the type of broad-based wealth creation we are seeking to build through our investments. They are therefore ineligible for our portfolios, no matter how much they give to charity, or how exemplary their environmental records may be.

If capitalism is the best system in the world for distributing products and services as cheaply, broadly and efficiently as possible, then what can be said of using these markets to distribute handguns or nuclear weapons?

Alcohol can play a useful role in society, providing individual pleasure and even health benefits, if appropriately used. It has played a deep cultural role for thousands of years. Gambling can be a challenging, exciting activity for those who can bear the risk and resist its temptations. However, we believe that putting these products and services in the hands of large publicly traded corporations dramatically increases the potential for their abuse and their costs to society.

Large public corporations are relentlessly driven to innovate and expand their reach, marketing their products as aggressively as possible to as many customers as possible. For these companies, effective marketing often means exploiting customers' addictions to these products or ignorance of their risks. This is a business model we do not support. Our goal is to help our investors build wealth for the future without financing broad societal harm.

Many investors exclude problematic industries because they believe it is immoral to profit from them, or because they wish to achieve consistency with their own personal choices and values. Others may believe that these industries carry unacceptably high risks that render them unsuitable for their portfolios. These investors aren't seeking to avoid "sin stocks," they are seeking to understand the reality of modern business practices.

Regardless of personal motivation, we believe that it is important for investors to take full responsibility for all implications of their investment decisions — financial, social and ecological — and that by doing so, they can have a positive influence on other investors, the companies they hold, and our society.

Responsible investment is a process of principled decision-making. We encourage you to visit **www.domini.com** and take a careful look at our investment standards. Consider whether the **Domini Social Equity Fund** is consistent with your principles.
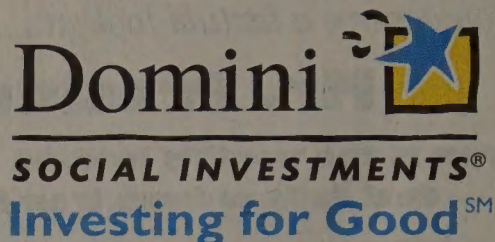
www.DominiFunds.com | 1-800-762-6814 | f ⠀